CHAPTER 4

POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE SOUTH FORK CUMBERLAND RIVER WATERSHED

- 4.1 Background.
- 4.2. Characterization of HUC-10 Subwatersheds
 - 4.2.A. 0513010401 (New River)
 - 4.2.B. 0513010402 (Clear Fork)
 - 4.2.C. 0513010403 (White Oak Creek)
 - 4.2.D. 0513010404 (Big South Fork Cumberland River)
 - 4.2.E. 0513010405 (North White Oak Creek)
 - 4.2.F. 0513010407 (Little South Fork Cumberland River)
- **4.1. BACKGROUND.** This chapter is organized by HUC-12 subwatershed, and the description of each subwatershed is divided into four parts:
 - i. General description of the subwatershed
 - ii. Description of point source contributions
 - ii.a. Description of facilities discharging to water bodies listed on the 2004 303(d) list
 - iii. Description of nonpoint source contributions

The Tennessee portion of the South Fork Cumberland River Watershed (HUC 05130104) has been delineated into six HUC 10 (10-digit) subwatersheds, each of which is composed of one or more HUC-12 subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.



Figure 4-1. The Tennessee Portion of the South Fork of the Cumberland River Watershed is Composed of Six USGS-Delineated Subwatersheds (10-Digit Subwatersheds). Locations of Allardt, Devonia, Huntsville, Oneida, and Sunbright are shown for reference.

4.2. CHARACTERIZATION OF HUC-10 SUBWATERSHEDS. The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Tennessee portion of the South Fork Cumberland River Watershed.

HUC-10	HUC-12
0513010401	051301040101 (New River)
	051301040102 (New River)
	051301040103 (Smokey Creek)
	051301040104 (New River)
	051301040105 (Buffalo Creek)
	051301040106 (New River)
	051301040107 (Brimstone Creek)
	051301040108 (New River)
0513010402	051301040201 (North Prong Clear Fork)
	051301040202 (South Prong Clear Fork)
	051301040203 (Upper Clear Fork)
	051301040204 Crooked Creek)
	051301040205 (Lower Clear Fork)
0513010403	051301040301 (Upper Whiteoak Creek)
	051301040302 (Camp Creek)
	051301040303 (Black Wolf Creek)
	051301040304 (Lower Whiteoak Creek)
0513010404	051301040401 (Big South Fork)
	051301040402 (Pine Creek)
	051301040403 (Station Camp Creek)
	051301040404 (Big South Fork)
	051301040405 (Bear Creek)
	051301040407 (Roaring Paunch Creek)
	051301040408 (Rock Creek)
0513010405	051301040501 (North Whiteoak Creek)
	051301040502 (Laurel Fork)
0513010407	051301040701 (Little South Fork)

Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages. NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.

4.2.A. 0513010401.

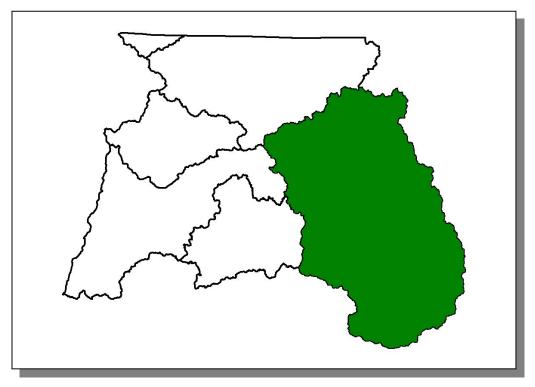


Figure 4-2. Location of Subwatershed 0513010401. All South Fork Cumberland River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.A.i. 051301040101 (New River).

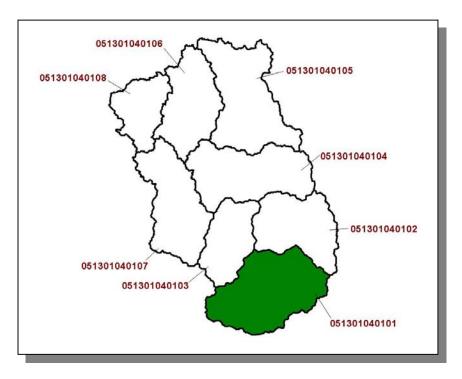


Figure 4-3. Location of Subwatershed 051301040101. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

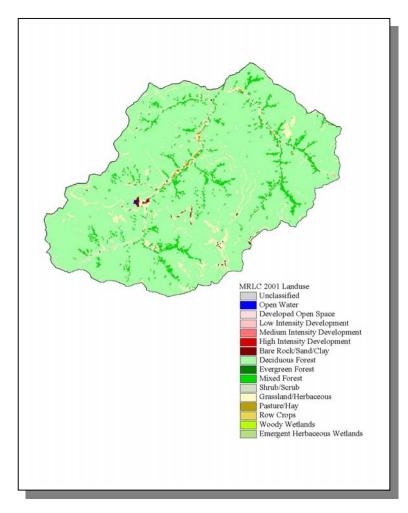


Figure 4-4. Illustration of Land Use Distribution in Subwatershed 051301040101.

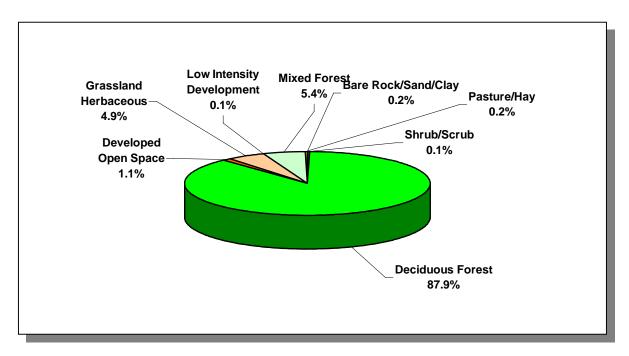


Figure 4-5. Land Use Distribution in Subwatershed 051301040101. More information is provided in Appendix IV.

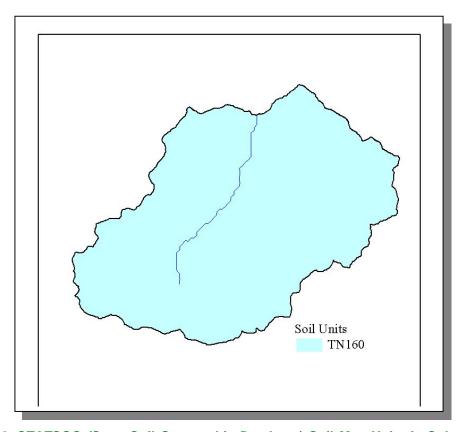


Figure 4-6. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040101.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	рН	SOIL TEXTURE	ERODIBILITY
TN160	160 0.00 B		2.69	5.36	Loam	0.25

Table 4-2. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040101. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION							
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Anderson	68,250	71,498	71,330	18.21	12,427	13,019	12,988	4.5
Campbell	35,079	37,878	39,854	0.01	4	4	5	25.0
Morgan	17,300	18,521	19,757	0.1	121	129	138	14.0
Scott	18,358	19,816	21,127	0.06	12	13	14	16.7
Total	138,987	147,713	152,206		12,564	13,165	13,145	4.6

Table 4-3. Population Estimates in Subwatershed 051301040101.

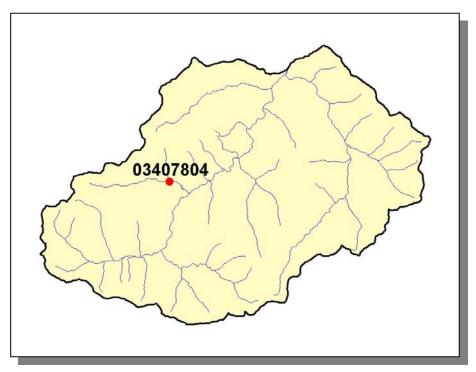


Figure 4-7. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040101. More information is provided in Appendix IV.

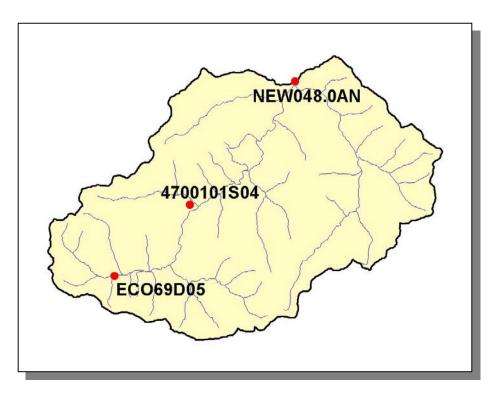


Figure 4-8. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040101. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.A.i.a. Point Source Contributions.

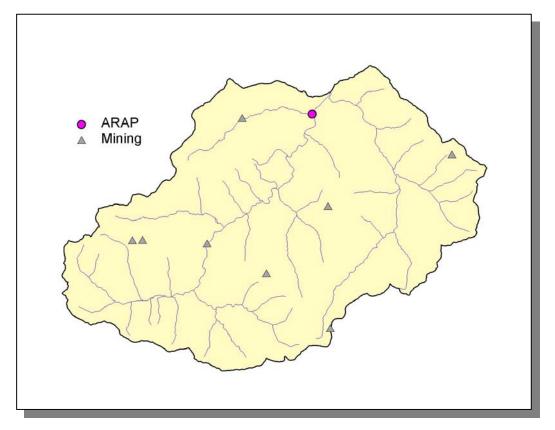


Figure 4-9. Location of Permits Issued in Subwatershed 051301040101. More information, including the names of facilities, is provided in Appendix IV.

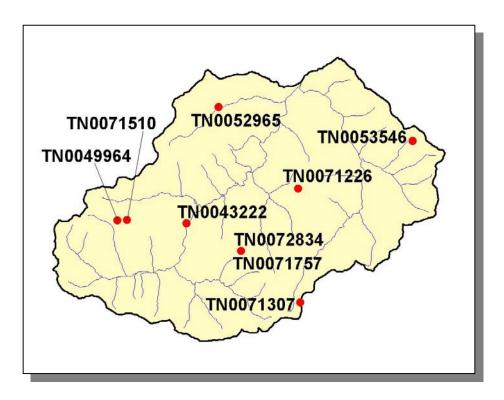


Figure 4-10. Location of Active Mining Sites in Subwatershed 051301040101. More information, including the names of mining operations, is provided in Appendix IV.

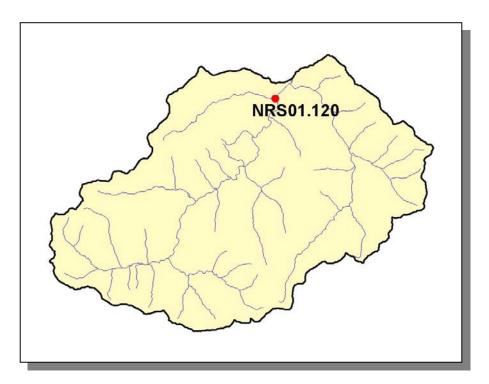


Figure 4-11. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 051301040101. More information is provided in Appendix IV.

4.2.A.i.b. Nonpoint Source Contributions.

	LIVESTOCK (COUNTS)										
Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold) Hogs Sheep											
95	202	7	< 5	455	0	<5					

Table 4-4. Summary of Livestock Count Estimates in Subwatershed 051301040101. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS											
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep					
Anderson	4,449	9,458	335		769		135					
Campbell	4,083	7,684	66		8	14						
Morgan	4,697	8,853	251	1,501,559	194	83	35					
Scott	2,177	4,447	216	1,989,506	196	17	74					

Table 4-5. Summary of Livestock Count Estimates in Anderson, Campbell, Morgan, and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVA	AL RATE
	Forest Land Timber Land		Growing Stock	Sawtimber
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)
Anderson	124.0	124.0	2.6	6.0
Campbell	250.3	250.2	2.6	10.6
Morgan	Morgan 287.8 270		3.5	10.9
Scott	300.3	300.3	5.5	21.4

Table 4-6. Forest Acreage and Annual Removal Rates (1987-1994) in Anderson, Campbell, Morgan, and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.37
Grass (Hayland)	0.75
Legumes (Hayland)	1.07
Legumes, Grass (Hayland)	3.18
Grass, Forbs, Legumes (Mixed Pasture)	1.60
Corn (Row Crops)	7.18
Tobacco (Row Crops)	1.63
Other Vegetable Truck Crops	12.05
Other Land in Farms	0.23
Farmsteads and Ranch Headquarters	1.00

Table 4-7. Annual Estimated Total Soil Loss in Subwatershed 051301040101.

4.2.A.ii. 051301040102 (New River).

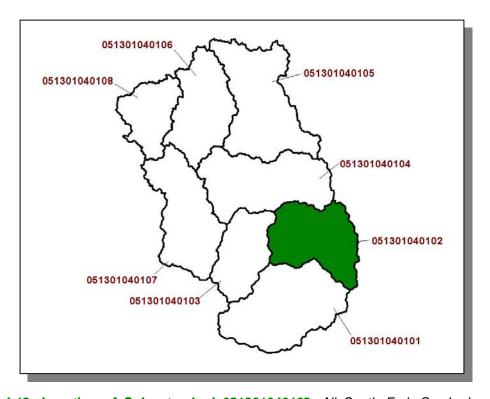


Figure 4-12. Location of Subwatershed 051301040102. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

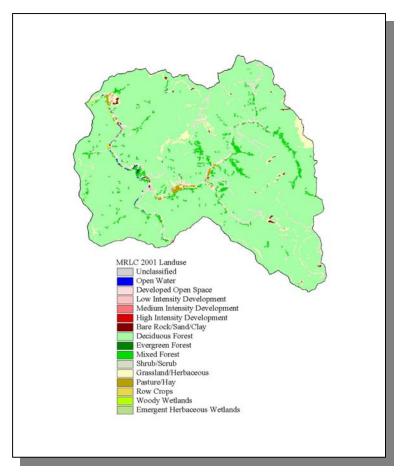


Figure 4-13. Illustration of Land Use Distribution in Subwatershed 051301040102.

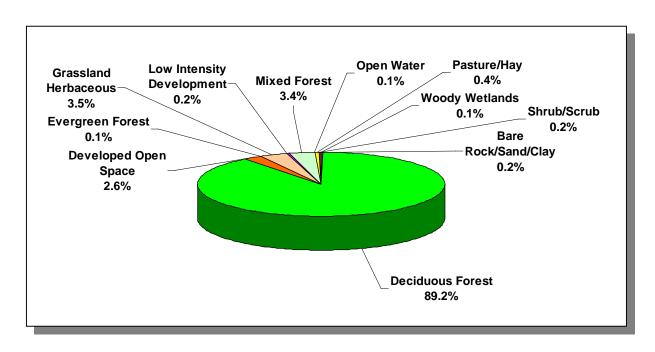


Figure 4-14. Land Use Distribution in Subwatershed 051301040102. More information is provided in Appendix IV.

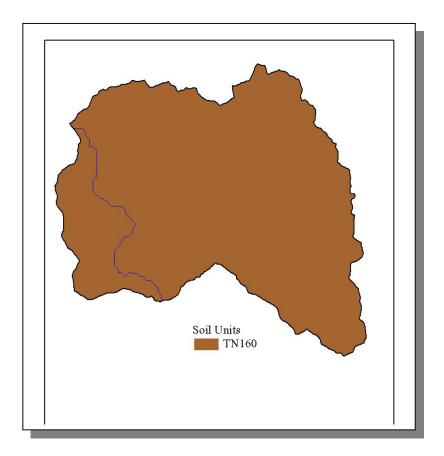


Figure 4-15. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040102.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	pН	SOIL TEXTURE	ERODIBILITY
TN160	0.00	В	2.69	5.36	Loam	0.25

Table 4-8. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040102. The definition of "Hydrologic Group" is provided in Appendix IV.

P		COUNTY POPULATION				IATED PC N WATER	PULATION SHED	
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Anderson	68,250	71,498	71,330	0.27	184	193	193	4.9
Campbell	35,079	37,878	39,854	8.50	2,981	3,219	3,386	13.6
Scott	18,358	19,816	21,127	0.62	114	123	131	14.9
Total	121,687	129,192	132,311		3,279	3,535	3,710	13.1

Table 4-9. Population Estimates in Subwatershed 051301040102.

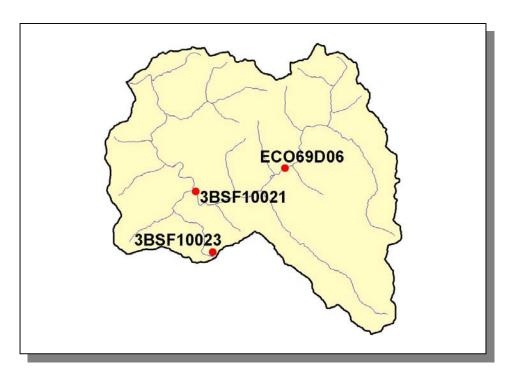


Figure 4-16. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040102. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.A.ii.a. Point Source Contributions.

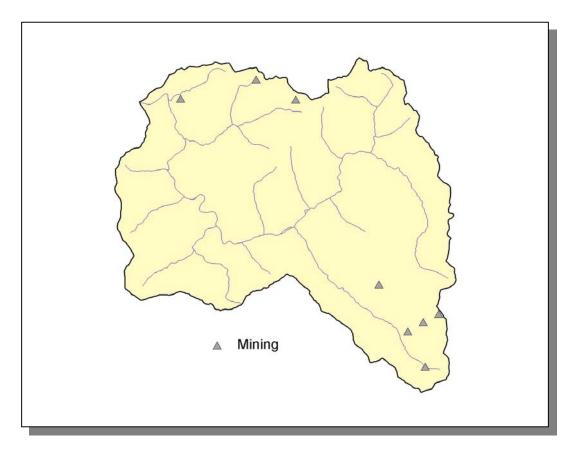


Figure 4-17. Location of Permits Issued in Subwatershed 051301040102. More information, including the names of facilities, is provided in Appendix IV.

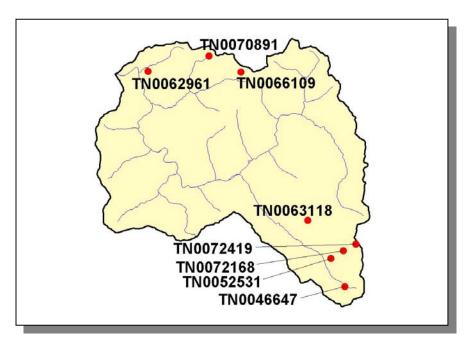


Figure 4-18. Location of Active Mining Sites in Subwatershed 051301040102. More information, including the names of mining operations, is provided in Appendix IV.

4.2.A.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS										
Beef Cow Cattle Milk Cow Chickens (Broilers Sold)										
69	131	<5	2,304							

Table 4-10. Summary of Livestock Count Estimates in Subwatershed 051301040102. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS											
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep					
Anderson	4,449	9,458	335		769		135					
Campbell	4,083	7,684	66		8	14						
Scott	2,177	4,447	216	1,989,506	196	17	74					

Table 4-11. Summary of Livestock Count Estimates in Anderson, Campbell, and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVA	AL RATE
	Forest Land Timber Land		Growing Stock	Sawtimber
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)
Anderson	124.0	124.0	2.6	6.2
Campbell	250.3	250.2	2.6	10.6
Scott	300.3	300.3	5.5	21.4

Table 4-12. Forest Acreage and Annual Removal Rates (1987-1994) in Anderson, Campbell, and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.63
Grass (Hayland)	1.76
Legumes, Grass (Hayland)	0.50
Legumes (Hayland)	1.07
Grass, Forbs, Legumes (Mixed Pasture)	2.56
Tobacco (Row Crops)	14.82
Other Vegetable and Truck Crops	3.52
Non-Agricultural Land Use	0
Other Land in Farms	0.23
Farmsteads and Ranch Headquarters	0.09

Table 4-13. Annual Estimated Total Soil Loss in Subwatershed 051301040102.

4.2.A.iii. 051301040103 (Smokey Creek).

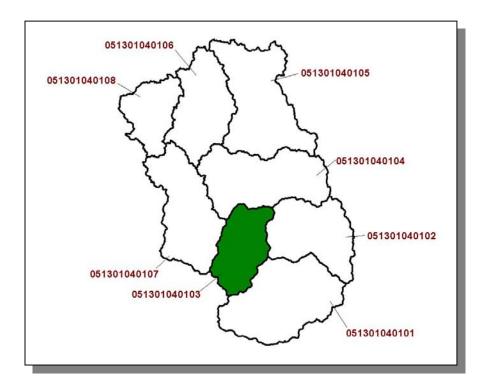


Figure 4-19. Location of Subwatershed 051301040103. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

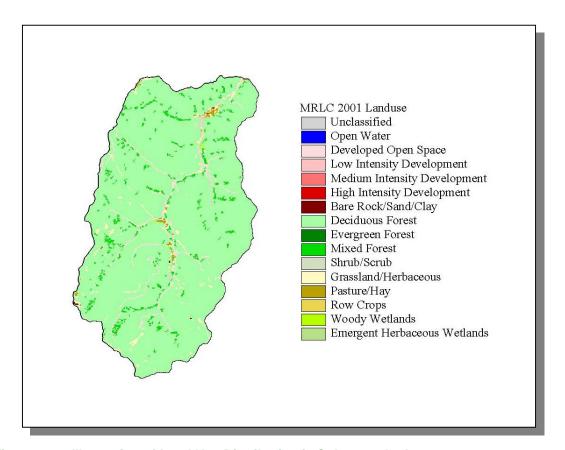


Figure 4-20. Illustration of Land Use Distribution in Subwatershed 051301040103.

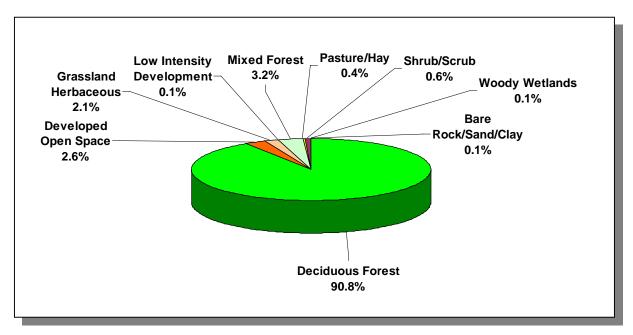


Figure 4-21. Land Use Distribution in Subwatershed 051301040103. More information is provided in Appendix IV.

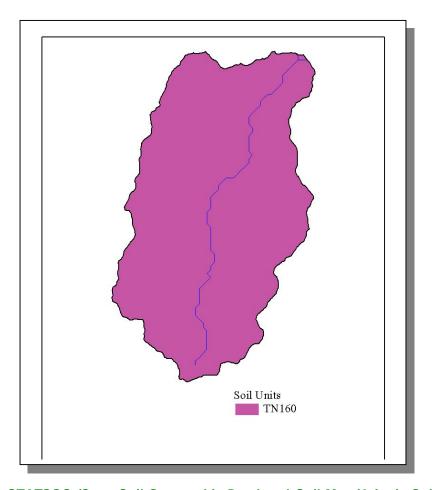


Figure 4-22. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040103.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	pН	SOIL TEXTURE	ERODIBILITY
TN160	0.00	В	2.69	5.36	Loam	0.25

Table 4-14. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040103. The definition of "Hydrologic Group" is provided in Appendix IV.

26

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990 1997 2000		Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)	
Anderson	68,250	71,498	71,330	0.36	247	259	258	4.5
Campbell	35,079	37,878	39,854	0.01	4	4	5	25.0
Morgan	17,300	18,521	19,757	0.09	16	17	18	12.5
Scott	18,358	19,816	21,127	5.86	1,076	1,161	1,238	15.1
Total	138,987	147,713	152,068		1,343	1,441	1,519	13.1

Table 4-15. Population Estimates in Subwatershed 051301040103.

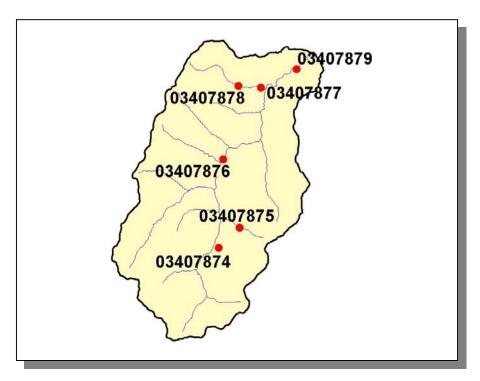


Figure 4-23. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040103. More information is provided in Appendix IV.

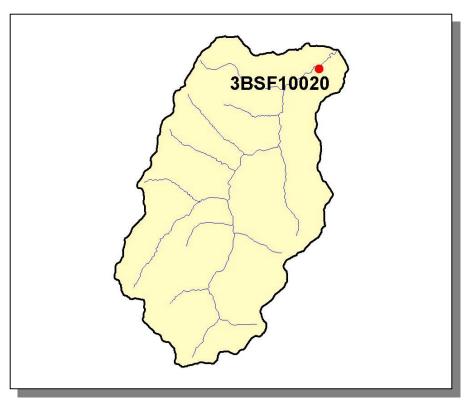


Figure 4-24. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040103. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.A.iii.a. Point Source Contributions.

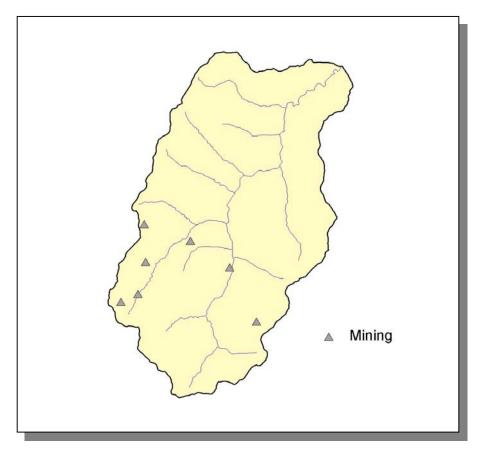


Figure 4-25. Location of Permits Issued in Subwatershed 051301040103. More information, including the names of facilities, is provided in Appendix IV.

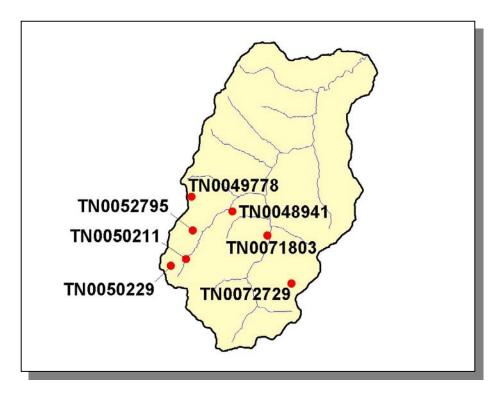


Figure 4-26. Location of Active Mining Sites in Subwatershed 051301040103. More information, including the names of mining operations, is provided in Appendix IV.

4.2.A.iii.b. Nonpoint Source Contributions.

	LIVESTOCK COUNTS								
Beef Cow Cattle Milk Cow Chickens (Broilers Sold) Sheep									
	26	53	<5	22,092	<5				

Table 4-16. Summary of Livestock Count Estimates in Subwatershed 051301040103. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep			
Anderson	4,449	9,458	335		769		135			
Campbell	4,083	7,684	66		8	14				
Morgan	4,697	8,853	251	1,501,559	194	83	35			
Scott	2,177	4,447	216	1,989,506	196	17	74			

Table 4-17. Summary of Livestock Count Estimates in Anderson, Campbell, Morgan, and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Anderson	124.0	124.0	2.6	6.2	
Campbell	250.3	250.2	2.6	10.6	
Morgan 287.8		276.2	3.5	10.9	
Scott 300.3		300.3	5.5	21.4	

Table 4-18. Forest Acreage and Annual Removal Rates (1987-1994) in Anderson, Campbell, Morgan, and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.37
Grass (Hayland)	0.79
Legumes (Hayland)	1.07
Legumes, Grass (Hayland)	2.41
Grass, Forbs, Legumes (Mixed Pasture)	0.62
Corn (Row Crops)	7.18
Tobacco (Row Crops)	2.23
Other Vegetable and Truck Crops	11.67
Other Land in Farms	0.23
Farmsteads and Ranch Headquarters	0.12

Table 4-19. Annual Estimated Total Soil Loss in Subwatershed 051301040103.

4.2.A.iv. 051301040104 (New River).

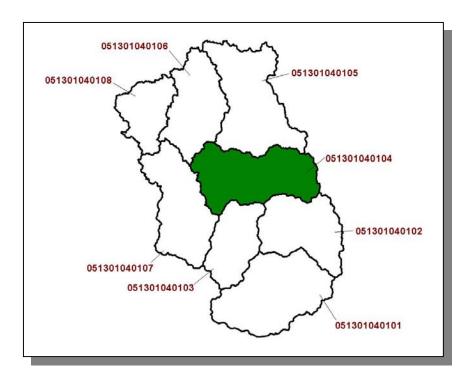


Figure 4-27. Location of Subwatershed 051301040104. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

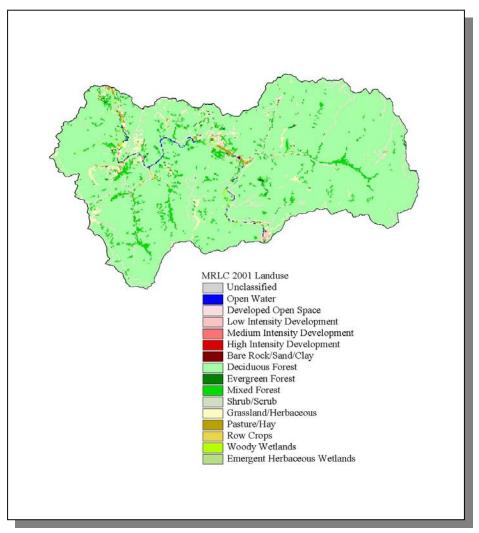


Figure 4-28. Illustration of Land Use Distribution in Subwatershed 051301040104.

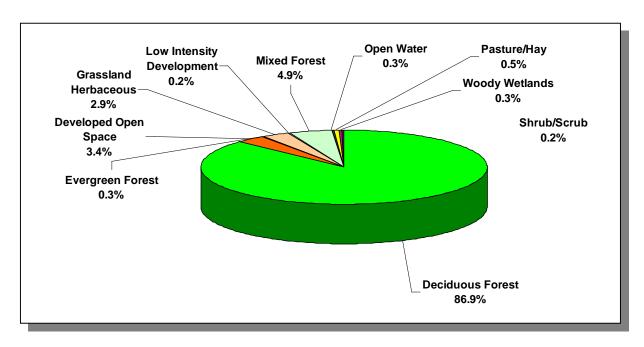


Figure 4-29. Land Use Distribution in Subwatershed 051301040104. More information is provided in Appendix IV.

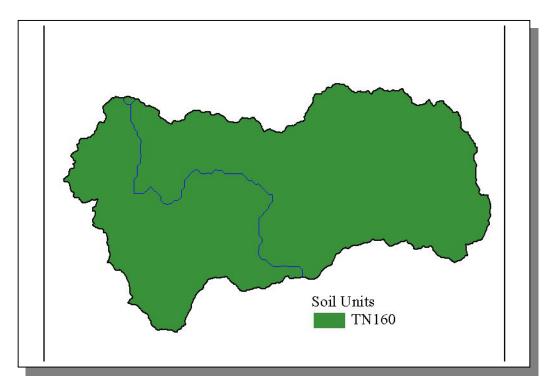


Figure 4-30. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040104.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY (in/hour)	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP		pH	SOIL TEXTURE	ERODIBILITY
TN160	0.00	В	2.69	5.36	Loam	0.25

Table 4-20. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040104. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					ATED PO	PULATION SHED	
County	1990 1997 2000		Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)	
Campbell	35,079	37,878	39,854	2.88	1,011	1,091	1,148	13.6
Scott	18,358	19,816	21,127	8.24	1,512	1,632	1,740	15.1
Total	53,437	57,694	60,981		2,523	2,723	2,888	14.5

Table 4-21. Population Estimates in Subwatershed 051301040104.

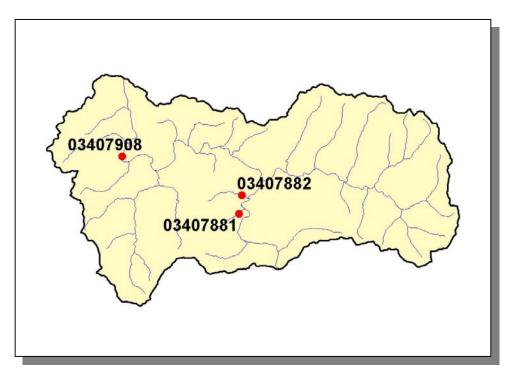


Figure 4-31. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040104. More information is provided in Appendix IV.

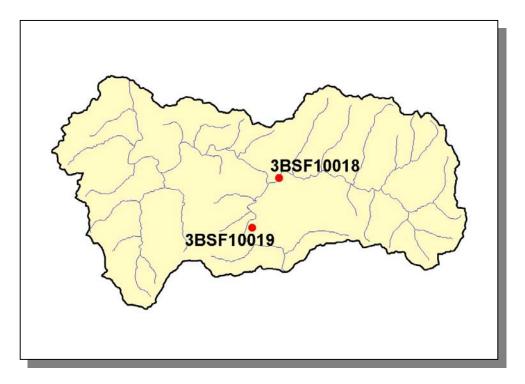


Figure 4-32. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040104. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.A.iv.a. Point Source Contributions.

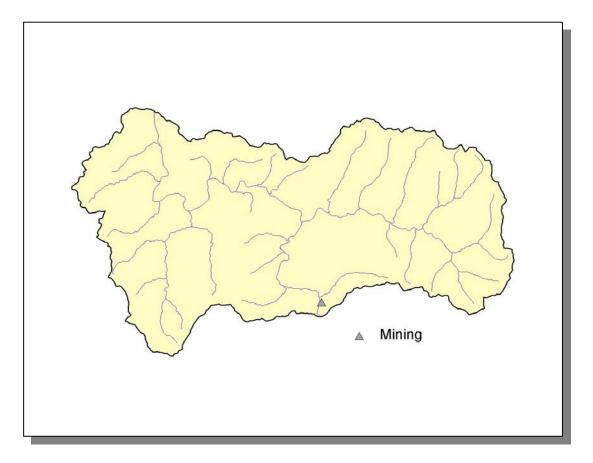


Figure 4-33. Location of Permits Issued in Subwatershed 051301040104. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-34. Location of Active Mining Sites in Subwatershed 051301040104. More information, including the names of mining operations, is provided in Appendix IV.

4.2.A.iv.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS							
Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Sheep			
53	107	<5	38,986	<5			

Table 4-22. Summary of Livestock Count Estimates in Subwatershed 051301040104. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens	Нодо	Sheep
County	beel Cow	Callle	WIIK COW	(Brollers Sold)	(Layers)	Hogs	Sneep
Campbell	4,083	7,684	66		8	14	
Scott	2,177	4,447	216	1,989,506	196	17	74

Table 4-23. Summary of Livestock Count Estimates in Campbell and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Campbell	250.3	250.2	2.6	10.6	
Scott	300.3	300.3	5.5	21.4	

Table 4-24. Forest Acreage and Annual Removal Rates (1987-1994) in Campbell and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.67
Grass (Hayland)	1.78
Legumes, Grass (Hayland)	0.44
Grass, Forbs, Legumes (Mixed Pasture)	1.1
Tobacco (Row Crops)	15.11
Other Vegetable Truck Crops	3.33
Farmsteads and Ranch Headquarters	0.08

Table 4-25. Annual Estimated Total Soil Loss in Subwatershed 051301040104.

4.2.A.v. 051301040105 (Buffalo Creek).

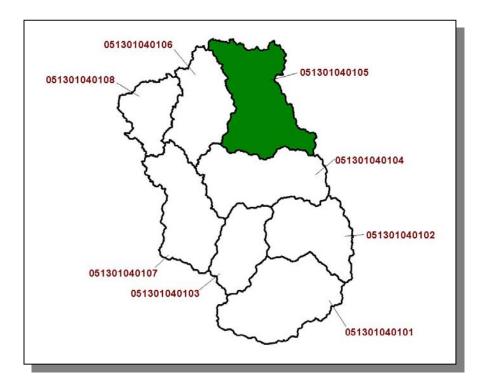


Figure 4-35. Location of Subwatershed 051301040105. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

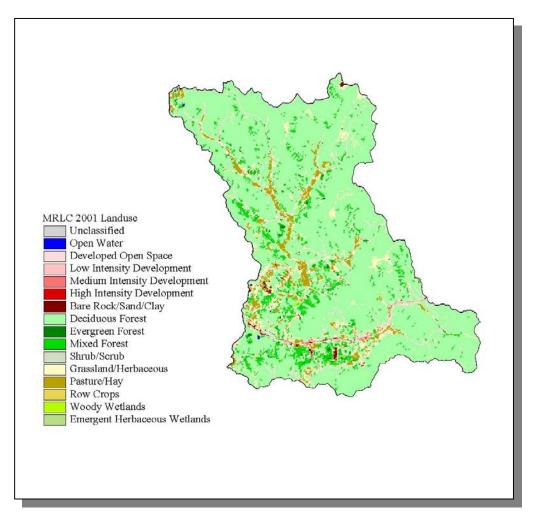


Figure 4-36. Illustration of Land Use Distribution in Subwatershed 051301040105.

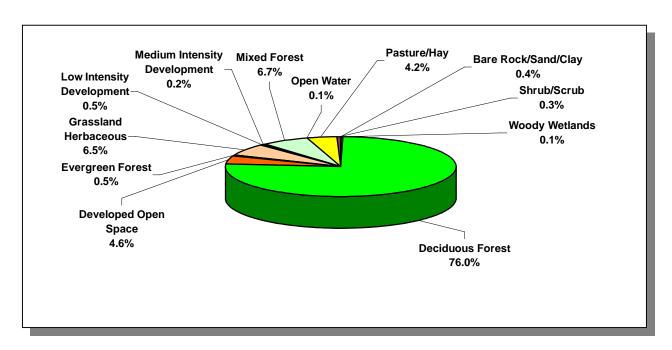


Figure 4-37. Land Use Distribution in Subwatershed 051301040102. More information is provided in Appendix IV.

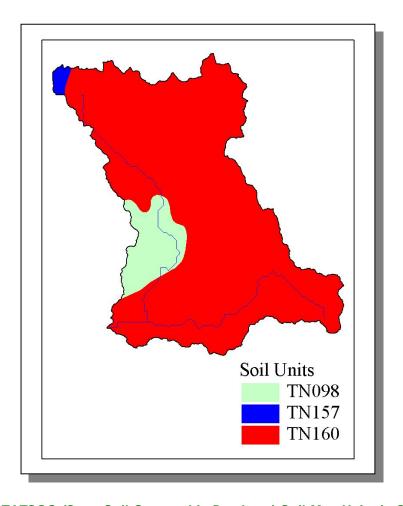


Figure 4-38. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040105.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	рН	SOIL TEXTURE	ERODIBILITY
TN098	1.00	С	3.98	4.82	Loam	0.32
TN157	0.00	В	2.38	4.62	Loam	0.28
TN160	0.00	В	2.69	5.36	Loam	0.25

Table 4-26. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040105. The definition of "Hydrologic Group" is provided in Appendix IV.

43

	COUNTY POPULATION				IATED PC N WATER	PULATION SHED		
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Campbell	35,079	37,878	39,854	1.1	386	417	439	13.7
Scott	18,358	19,816	21,127	10.97	2,014	2,174	2,318	15.1
Total	53,437	57,694	60,981		2,400	2,591	2,757	14.9

Table 4-27. Population Estimates in Subwatershed 051301040105.

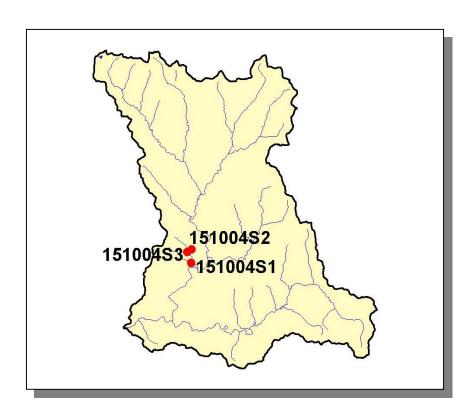


Figure 4-39. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040105. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.A.v.a. Point Source Contributions.

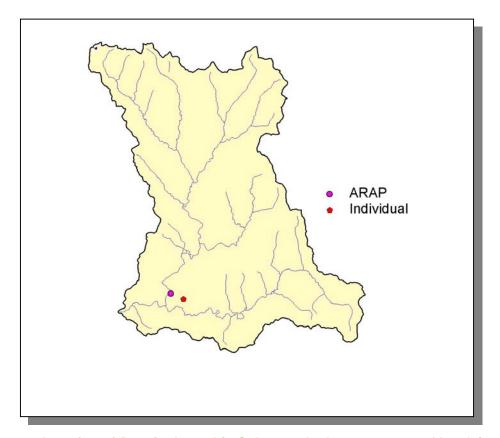


Figure 4-40. Location of Permits Issued in Subwatershed 051301040105. More information, including the names of facilities, is provided in Appendix IV.

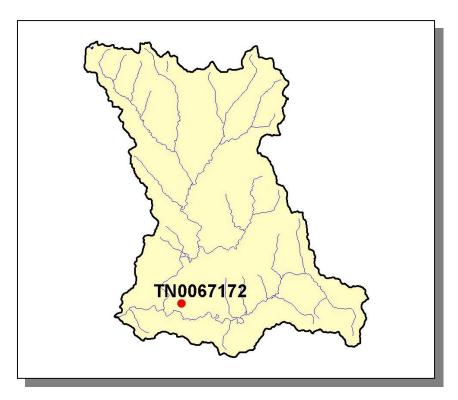


Figure 4-41. Location of Active NPDES Sites in Subwatershed 051301040105. More information, including the names of facilities, is provided in Appendix IV.

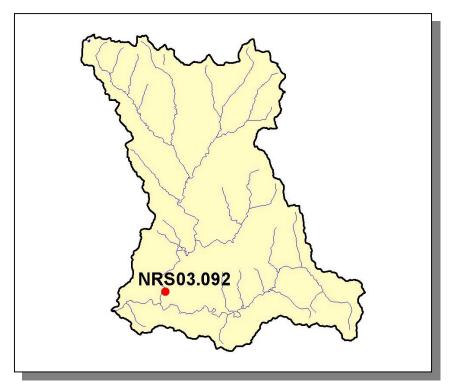


Figure 4-42. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 051301040105. More information is provided in Appendix IV.

4.2.v.a.i. Dischargers to Water Bodies Listed on the 2004 303(d) List

There is one NPDES facility discharging to water bodies listed on the 2004 303(d) list in Subwatershed 051301040105:

• TN0067172 (Fairview Elementary School) discharges to an unnamed tributary @ RM 0.5 to Straight Fork @ RM 2.0

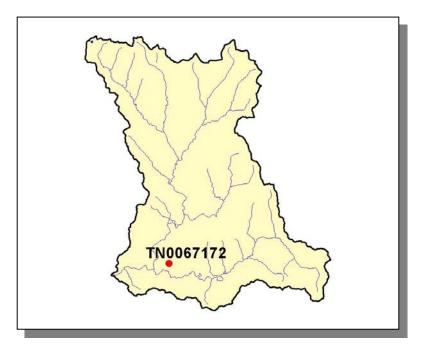


Figure 4-43. Location of NPDES Dischargers to Water Bodies Listed on the 2004 303(d) List in Subwatershed 051301040105. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0067172			0		

Table 4-28. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 051301040105. Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.

			FECAL				SETTLEABLE		
PERMIT #	CBOD ₅	E.coli	COLIFORM	NH ₃	TRC	TSS	SOLIDS	DO	рН
TN0067172	Χ	Χ	X	Х	Χ	Χ	X	Χ	X

Table 4-29. Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 051301040105. CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids.

4.2.A.v.b. Nonpoint Source Contributions.

	LIVESTOCK (COUNTS)						
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep	
282	576	27	<5	251,615	<5	9	

Table 4-30. Summary of Livestock Count Estimates in Subwatershed 051301040105.According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS						
				Chickens	Chickens		
County	Beef Cow	Cattle	Milk Cow	(Broilers Sold)	(Layers)	Hogs	Sheep
Campbell	4,083	7,684	66		8	14	
Scott	2,177	4,447	216	1,989,506	196	17	74

Table 4-31. Summary of Livestock Count Estimates in Campbell and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Campbell	250.3	250.2	2.6	10.6	
Scott	300.3	300.3	5.5	21.4	

Table 4-32. Forest Acreage and Annual Removal Rates (1987-1994) in Campbell and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.44
Grass (Hayland)	1.78
Legumes, Grass (Hayland)	0.44
Grass, Forbs, Legumes (Mixed Pasture)	0.76
Tobacco (Row Crops)	15.11
Other Vegetable and Truck Crop	3.33
Farmsteads and Ranch Headquarters	0.09

Table 4-33. Annual Estimated Total Soil Loss in Subwatershed 051301040105.

4.2.A.vi. 051301040106 (New River).

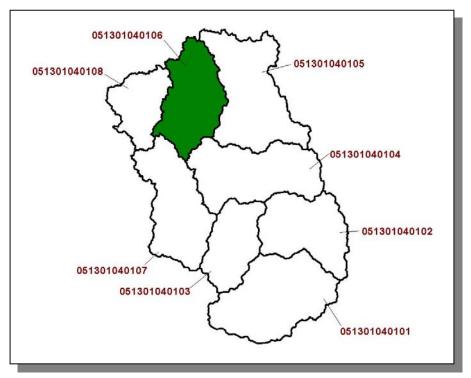


Figure 4-44. Location of Subwatershed 051301040106. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

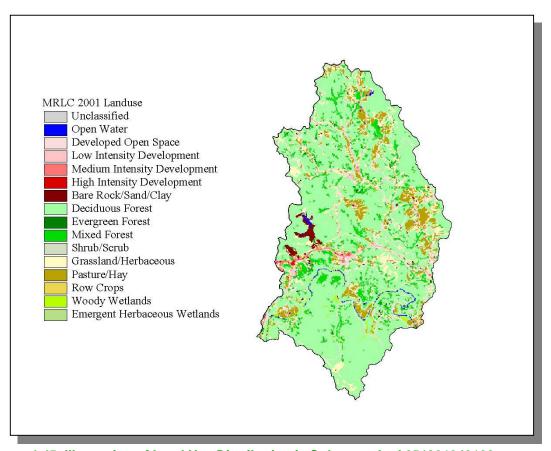


Figure 4-45. Illustration of Land Use Distribution in Subwatershed 051301040106.

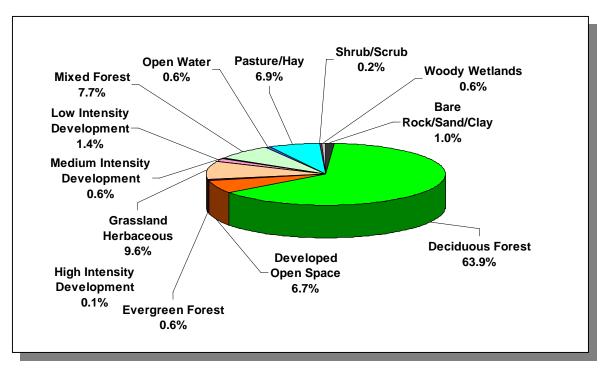


Figure 4-46. Land Use Distribution in Subwatershed 051301040106. More information is provided in Appendix IV.

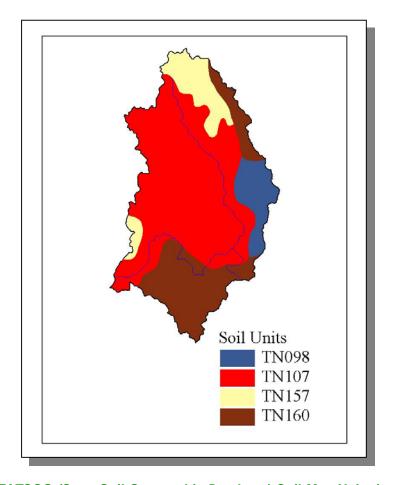


Figure 4-47. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040106.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28
TN160	0.00	В	2.69	5.36	Loam	0.25

Table 4-34. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040106. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION				N WATER	PULATION SHED		
County	1990	1990 1997 2000		Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Scott	18,358	19,816	21,127	8.37	1,536	1,658	1,768	15.1

Table 4-35. Population Estimates in Subwatershed 051301040106.

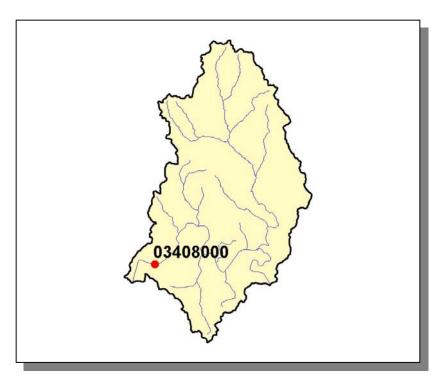


Figure 4-48. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040106. More information is provided in Appendix IV.

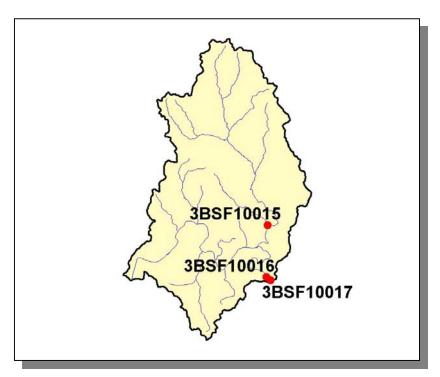


Figure 4-49. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040106. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.A.vi.a. Point Source Contributions.

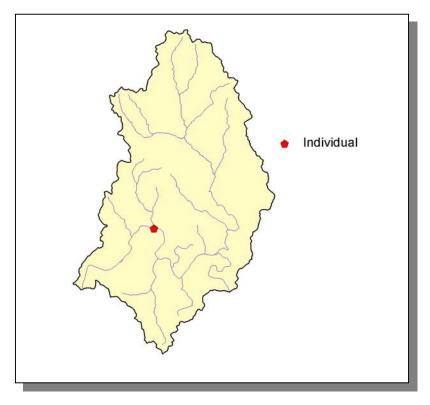


Figure 4-50. Location of Permits Issued in Subwatershed 051301040106. More information, including the names of facilities, is provided in Appendix IV.

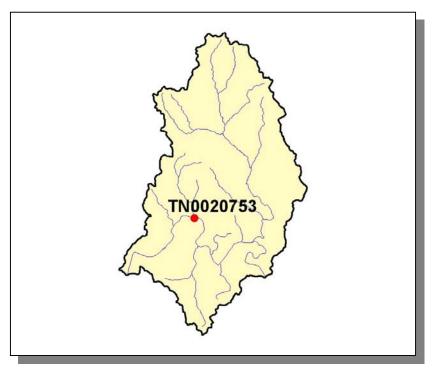


Figure 4-51. Location of Active NPDES Sites in Subwatershed 051301040106. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.vi.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)							
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep	
317	647	31	< 5	289,541	<5	11	

Table 4-36. Summary of Livestock Count Estimates in Subwatershed 051301040106. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep
Scott	2,177	4,447	216	1,989,506	196	17	74

Table 4-37. Summary of Livestock Count Estimates in Scott County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
County	Forest Land Timber Land (thousand acres)		Growing Stock (million cubic feet)	Sawtimber (million board feet)	
Scott	300.3	300.3	5.5	21.4	

Table 4-38. Forest Acreage and Annual Removal Rates (1987-1994) in Scott County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.33
Grass, Forbs, Legumes (Mixed Pasture)	0.58
Farmsteads and Ranch Headquarters	0.09

Table 4-39. Annual Estimated Total Soil Loss in Subwatershed 051301040106.

4.2.A.vii. 051301040107 (Brimstone Creek).

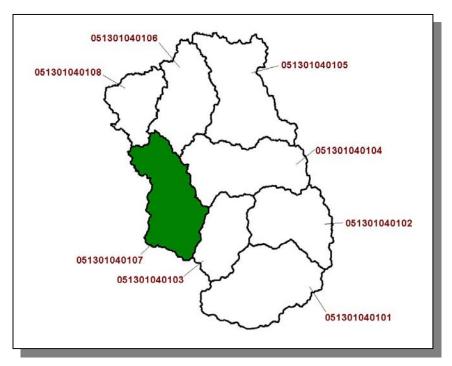


Figure 4-52. Location of Subwatershed 051301040107. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

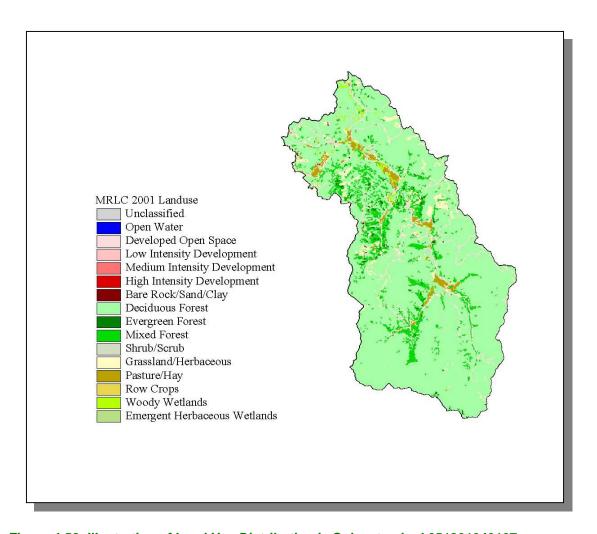


Figure 4-53. Illustration of Land Use Distribution in Subwatershed 051301040107.

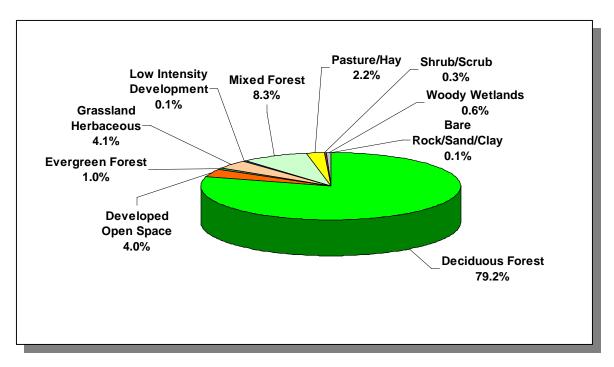


Figure 4-54. Land Use Distribution in Subwatershed 051301040107. More information is provided in Appendix IV.

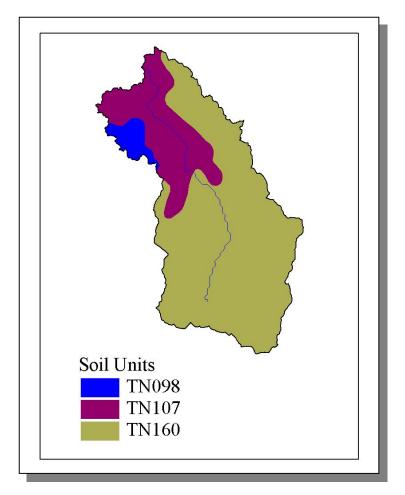


Figure 4-55. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040107.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN160	0.00	В	2.69	5.36	Loam	0.25

Table 4-40. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040107. The definition of "Hydrologic Group" is provided in Appendix IV.

62

	COUNTY POPULATION				IATED PO N WATER	PULATION SHED		
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
-								
Morgan	17,300	18,521	19,757	1.16	201	215	229	13.9
Scott	18,358	19,816	21,127	8.62	1,583	1,708	1,821	15.0
Total	35,658	38,337	40,884		1,784	1,923	2,050	14.9

Table 4-41. Population Estimates in Subwatershed 051301040107.



Figure 4-56. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040107. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.A.vii.a. Point Source Contributions.

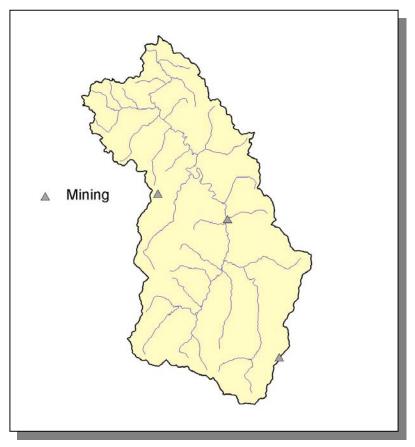


Figure 4-57. Location of Permits Issued in Subwatershed 051301040107. More information, including the names of facilities, is provided in Appendix IV.

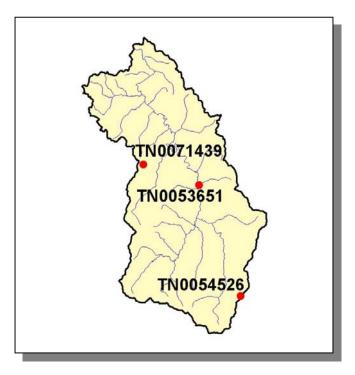


Figure 4-58. Location of Active Mining Sites in Subwatershed 051301040107. More information, including the names of mining operations, is provided in Appendix IV.

4.2.A.vii.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)						
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep
139	283	13	<5	122,173	<5	5

Table 4-42. Summary of Livestock Count Estimates in Subwatershed 051301040107. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS						
				Chickens	Chickens		
County	Beef Cow	Cattle	Milk Cow	(Broilers Sold)	(Layers)	Hogs	Sheep
Morgan	4,697	8,853	251	1,501,559	194	83	35
Scott	2,177	4,447	216	1,989,506	196	17	74

Table 4-43. Summary of Livestock Count Estimates in Morgan and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Morgan	287.8	276.2	3.5	10.9	
Scott	300.3	300.3	5.5	21.4	

Table 4-44. Forest Acreage and Annual Removal Rates (1987-1994) in *Morgan and Scott Counties*.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.34
Grass (Hayland)	0.77
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	0.53
Corn (Row Crops)	7.18
Farmsteads and Ranch Headquarters	0.08

Table 4-45. Annual Estimated Total Soil Loss in Subwatershed 051301040107.

4.2.A.viii. 051301040108 (New River).

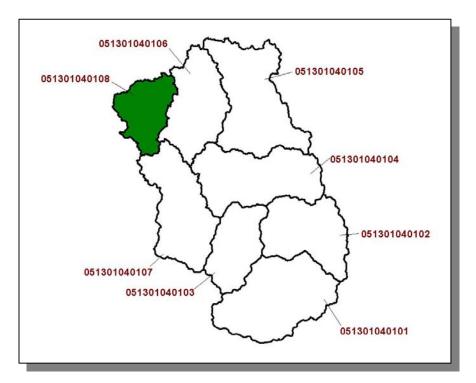


Figure 4-59. Location of Subwatershed 051301040108. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

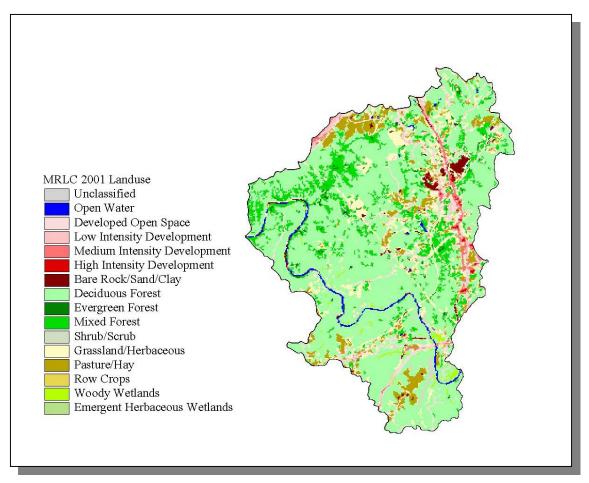


Figure 4-60. Illustration of Land Use Distribution in Subwatershed 051301040108.

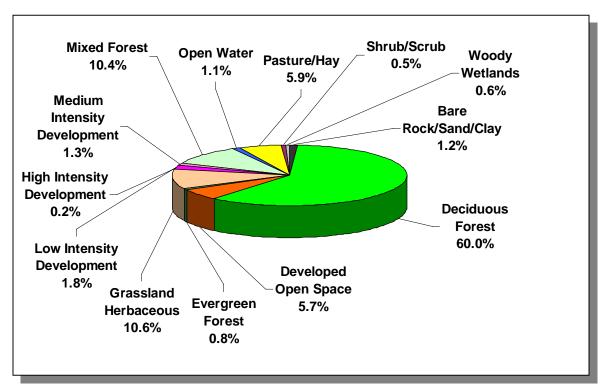


Figure 4-61. Land Use Distribution in Subwatershed 051301040108. More information is provided in Appendix IV.

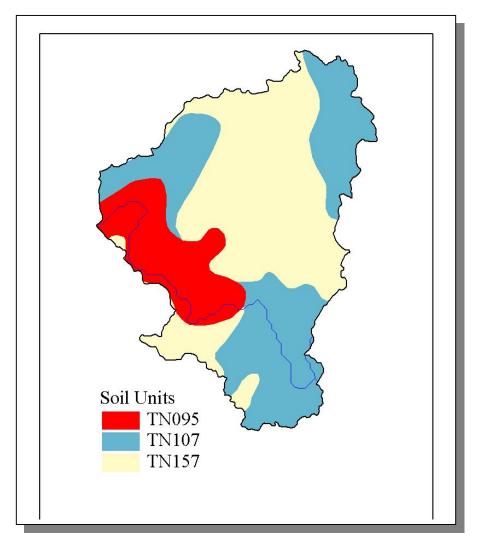


Figure 4-62. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040108.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28

Table 4-46. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040108. The definition of "Hydrologic Group" is provided in Appendix IV.

70

	COUNTY POPULATION					IATED PC N WATER		
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Scott	18,358	19,816	21,127	5.19	954	1,029	1,097	15.0

Table 4-47. Population Estimates in Subwatershed 051301040108.

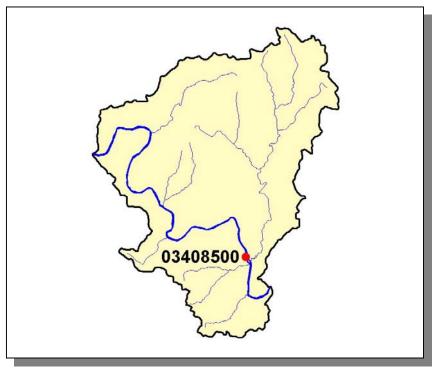


Figure 4-63. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040108. More information is provided in Appendix IV.

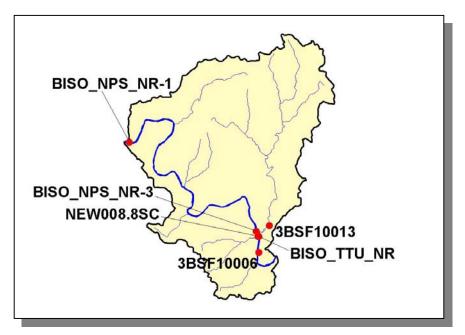


Figure 4-64. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040108. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.A.viii.a. Point Source Contributions.

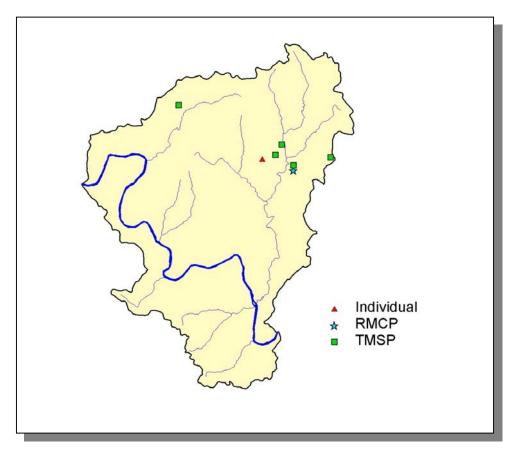


Figure 4-65. Location of Permits Issued in Subwatershed 051301040108. More information, including the names of facilities, is provided in Appendix IV.

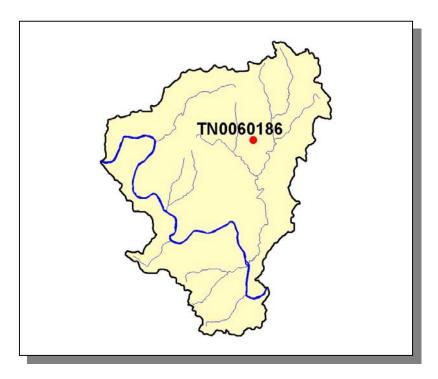


Figure 4-66. Location of Active NPDES Sites in Subwatershed 051301040108. More information, including the names of facilities, is provided in Appendix IV.

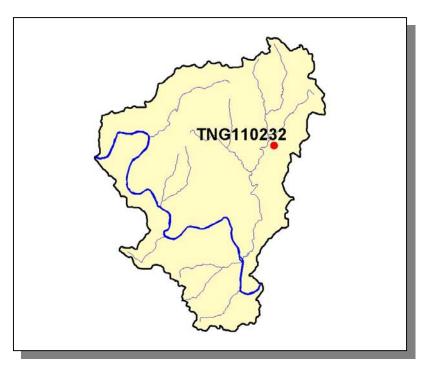


Figure 4-67. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 051301040108. More information is provided in Appendix IV.

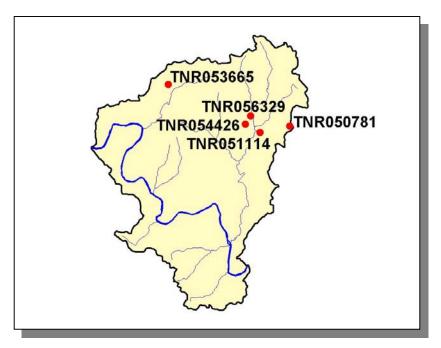


Figure 4-68. Location of TMSP Sites in Subwatershed 051301040108. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.viii.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)									
Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold) Hogs Sheep									
184	376	18	< 5	168,112	<5	6			

Table 4-48. Summary of Livestock Count Estimates in Subwatershed 051301040108. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
County Beef Cow Cattle Milk Cow (Broilers Sold) Chickens Hogs She							Sheep			
Scott 2,177 4,447 216 1,989,506 196 17 74										

Table 4-49. Summary of Livestock Count Estimates in Scott County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres) (thousand acres)		(million cubic feet)	(million board feet)	
Scott	300.3	300.3	5.5	21.4	

Table 4-50. Forest Acreage and Annual Removal Rates (1987-1994) in Scott County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.33
Grass, Forbs, Legumes (Mixed Pasture)	0.58
Farmsteads and Ranch Headquarters	0.09

Table 4-51. Annual Estimated Total Soil Loss in Subwatershed 051301040108.

4.2.B. 0513010402.

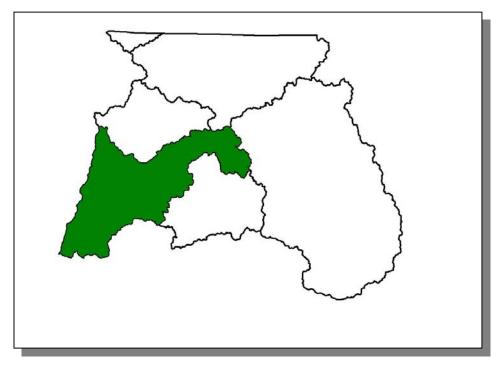


Figure 4-69. Location of Subwatershed 0513010402. All South Fork Cumberland River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.B.i. 051301040201 (North Prong Clear Fork).

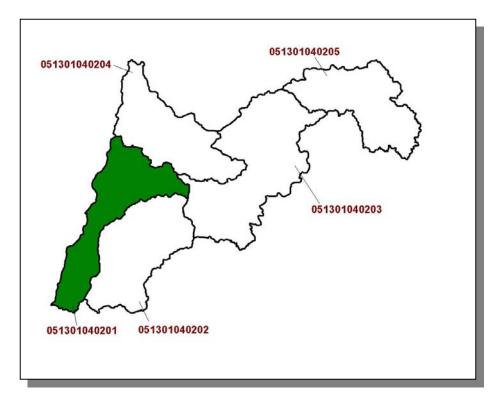


Figure 4-70. Location of Subwatershed 051301040201. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

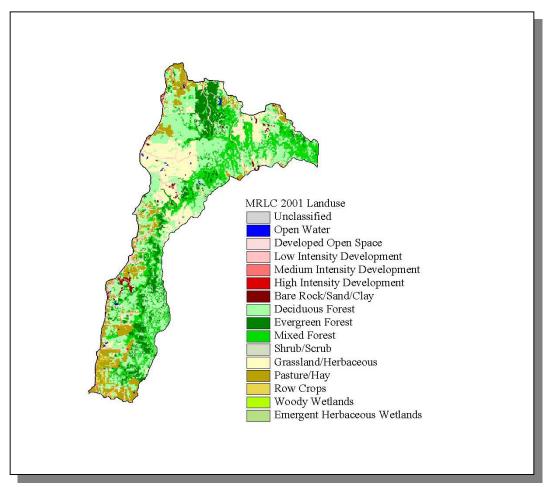


Figure 4-71. Illustration of Land Use Distribution in Subwatershed 051301040201.

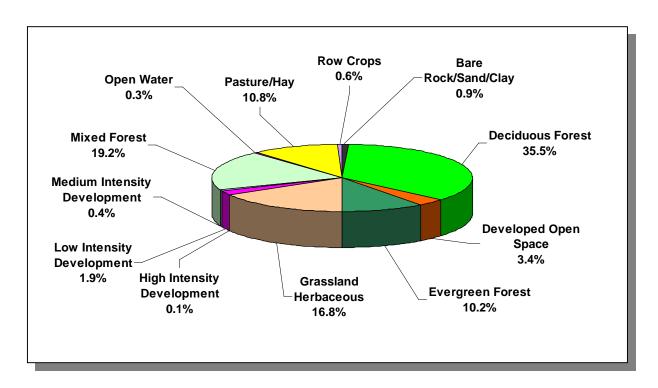


Figure 4-72. Land Use Distribution in Subwatershed 051301040201. More information is provided in Appendix IV.

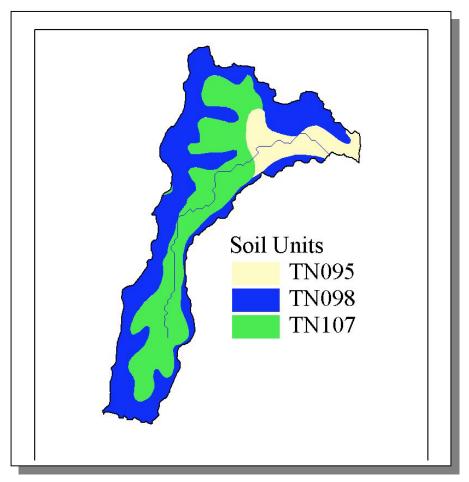


Figure 4-73. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040201.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28

Table 4-52. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040201. The definition of "Hydrologic Group" is provided in Appendix IV.

81

	COUNTY POPULATION					IATED PC N WATER	PULATION SHED	
County	1990 1997 2000		Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)	
Fentress	14,669	15,920	16,625	6.47	948	1,029	1,075	13.4

Table 4-53. Population Estimates in Subwatershed 051301040201.

4.2.B.i.a. Point Source Contributions.



Figure 4-74. Location of Permits Issued in Subwatershed 051301040201. More information, including the names of facilities, is provided in Appendix IV.

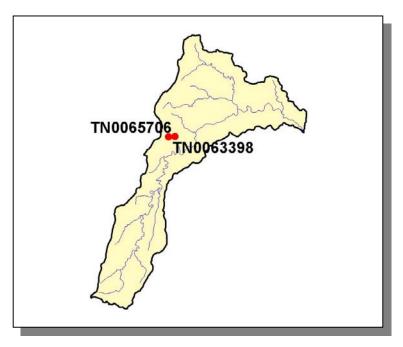


Figure 4-75. Location of Active Mining Sites in Subwatershed 051301040201. More information, including the names of mining operations, is provided in Appendix IV.

4.2.B.i.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)										
Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold) Hogs Sheep										
792 1,696 42 <5 716,228 72 8										

Table 4-54. Summary of Livestock Count Estimates in Subwatershed 051301040201.According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep			
Fentress	8,058	17,259	430	7,290,026	474	729	79			

Table 4-55. Summary of Livestock Count Estimates in Fentress County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
County	Forest Land Timber Land (thousand acres)		Growing Stock (million cubic feet)	Sawtimber (million board feet)	
Fentress	244.1	244.1	3.6	14.3	

Table 4-56. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.72
Legumes, Grass (Hayland)	0.56
Grass, Forbs, Legumes (Mixed Pasture)	0.27
Corn (Row Crops)	16.18
Soybeans (Row Crops)	6.00
Wheat (Close-Grown Cropland)	43.4
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	0.4

Table 4-57. Annual Estimated Total Soil Loss in Subwatershed 051301040201.

4.2.B.ii. 051301040202 (South Prong Clear Fork).

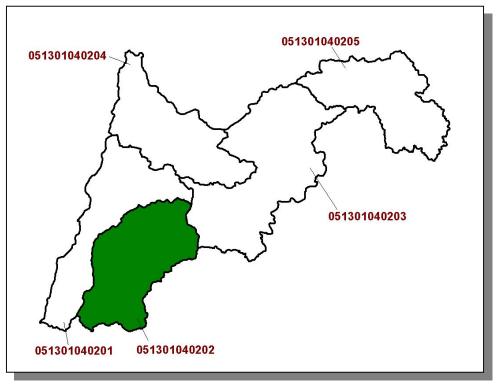


Figure 4-76. Location of Subwatershed 051301040202. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

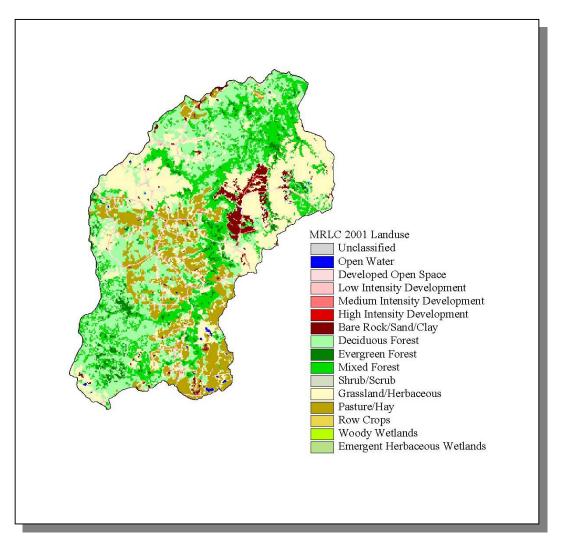


Figure 4-77. Illustration of Land Use Distribution in Subwatershed 051301040202.

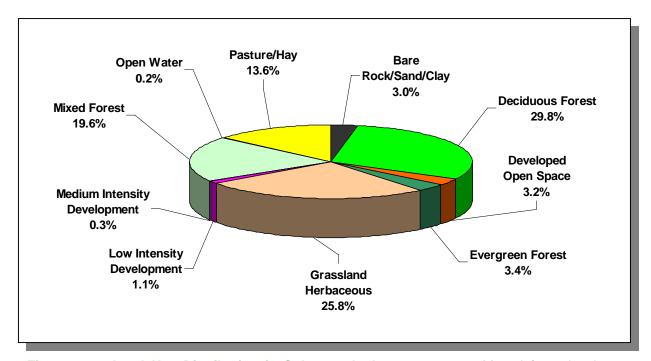


Figure 4-78. Land Use Distribution in Subwatershed 051301040202. More information is provided in Appendix IV.

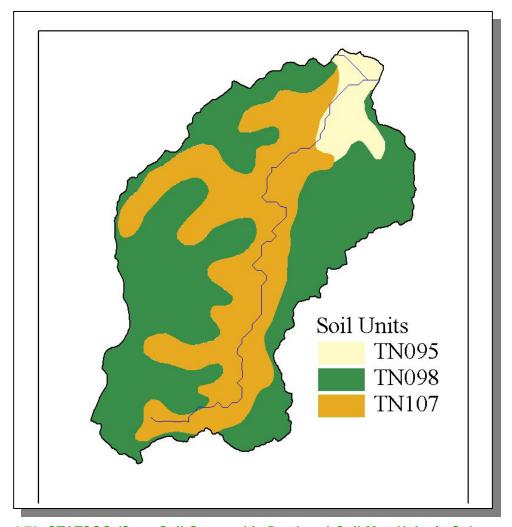


Figure 4-79. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040202.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28

Table 4-58. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040202. The definition of "Hydrologic Group" is provided in Appendix IV.

89

	COUNTY POPULATION					IATED PO N WATER	PULATION SHED	
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Fentress	14,669	15,920	16,625	6.52	957	1,038	1,084	13.3
Morgan	17,300	18,521	19,757	0.51	89	95	102	14.6
Total	31,969	34,441	36,382		1,046	1,133	1,186	13.4

Table 4-59. Population Estimates in Subwatershed 051301040202.

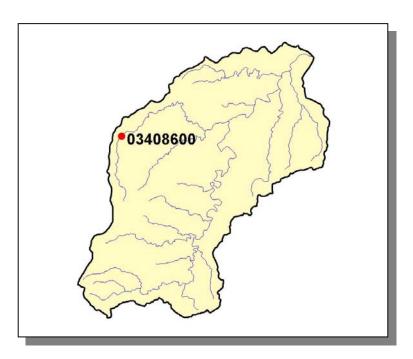


Figure 4-80. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040202. More information is provided in Appendix IV.

4.2.B.ii.a. Point Source Contributions.

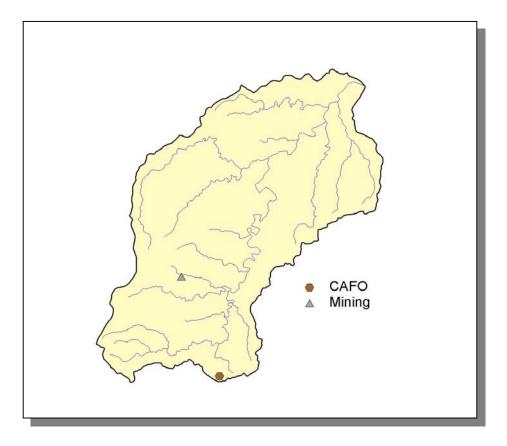


Figure 4-81. Location of Permits Issued in Subwatershed 051301040202. More information, including the names of facilities, is provided in Appendix IV.

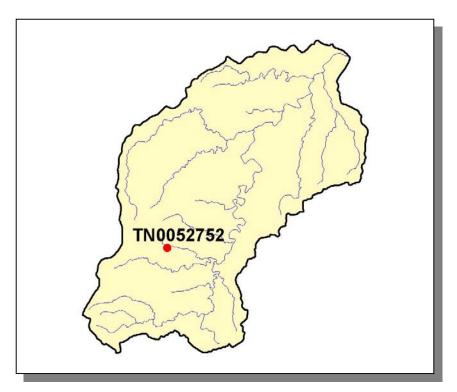


Figure 4-82. Location of Active Mining Sites in Subwatershed 051301040202. More information, including the names of mining operations, is provided in Appendix IV.

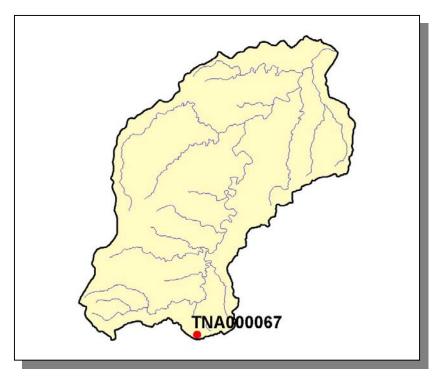


Figure 4-83. Location of Concentrated Animal Feeding Operations (CAFO) in Subwatershed 051301040202. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.ii.b. Nonpoint Source Contributions.

	LIVESTOCK (COUNTS)									
Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold) Hogs Sheep										
818	1,753	44	<5	740,319	74	8				

Table 4-60. Summary of Livestock Count Estimates in Subwatershed 051301040202. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
	Chickens Chickens									
County	Beef Cow	Cattle	Milk Cow	(Broilers Sold)	(Layers)	Hogs	Sheep			
Fentress	8,058	17,259	430	7,290,026	474	729	79			
Morgan	4,697	8,853	251	1,501,559	194	83	35			

Table 4-61. Summary of Livestock Count Estimates in Fentress and Morgan Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Fentress	244.1	244.1	3.6	14.3	
Morgan	287.8	276.2	3.5	10.9	

Table 4-62. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress and Morgan Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.70
Grass (Hayland)	0.77
Legumes, Grass (Hayland)	0.53
Grass, Forbs, Legumes (Mixed Pasture)	0.26
Corn (Row Crops)	15.49
Soybeans (Row Crops)	6.00
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crop	15.94
Farmsteads and Ranch Headquarters	0.37

Table 4-63. Annual Estimated Total Soil Loss in Subwatershed 051301040202.

4.2.B.iii. 051301040203 (Upper Clear Fork).

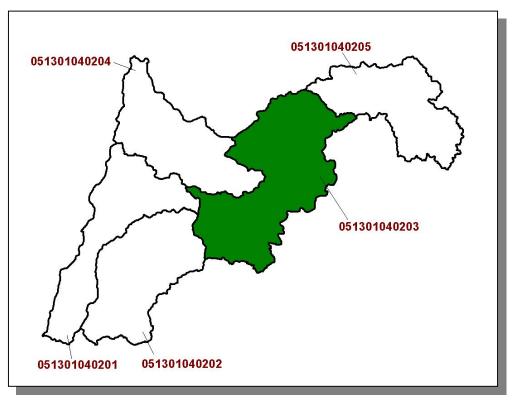


Figure 4-84. Location of Subwatershed 051301040203. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

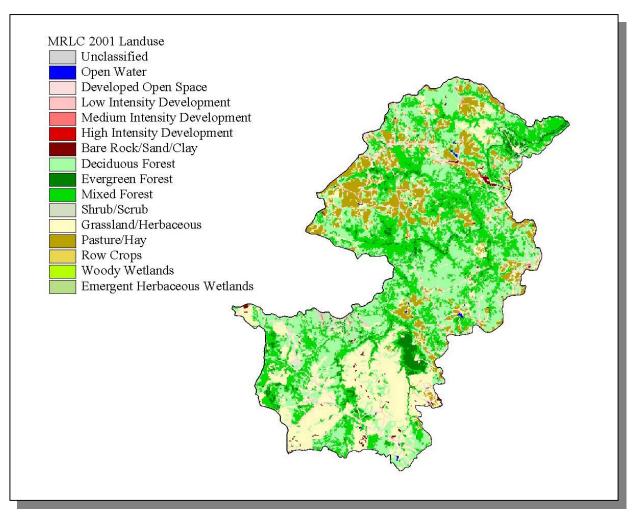


Figure 4-85. Illustration of Land Use Distribution in Subwatershed 051301040203.

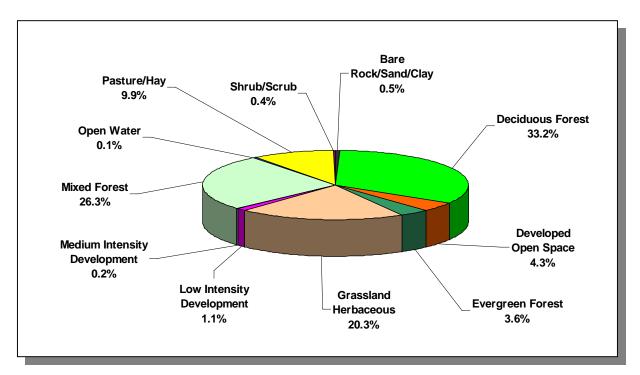


Figure 4-86. Land Use Distribution in Subwatershed 051301040203. More information is provided in Appendix IV.

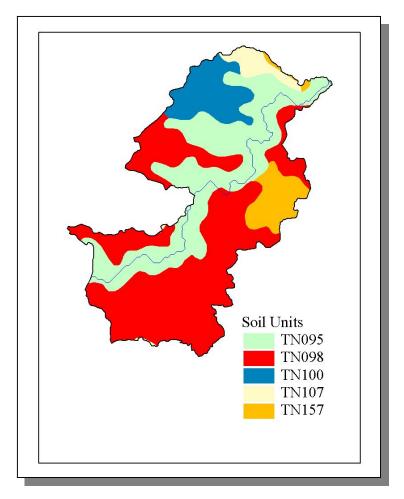


Figure 4-87. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040203.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN100	0.00	В	1.14	3.35	Silty Loam	0.21
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28

Table 4-64. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040203. The definition of "Hydrologic Group" is provided in Appendix IV.

97

	COUNTY POPULATION							
_				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Fentress	14,669	15,920	16,625	5.27	774	840	877	13.3
Morgan	17,300	18,521	19,757	4.82	834	893	953	14.3
Scott	18,358	19,816	21,127	0.01	2	2	2	0.0
Total	50,327	54,257	57,509		1,610	1,735	1,832	13.8

Table 4-65. Population Estimates in Subwatershed 051301040203.

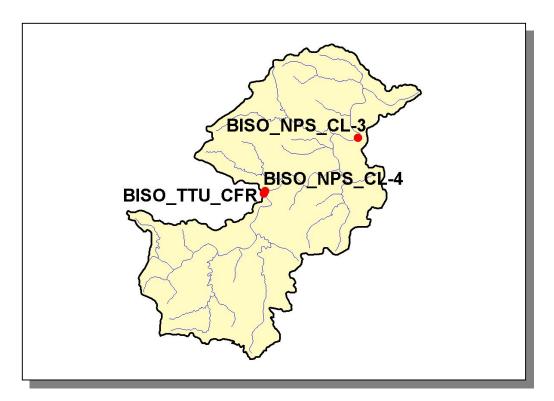


Figure 4-88. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040203. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.B.iii.a. Point Source Contributions.

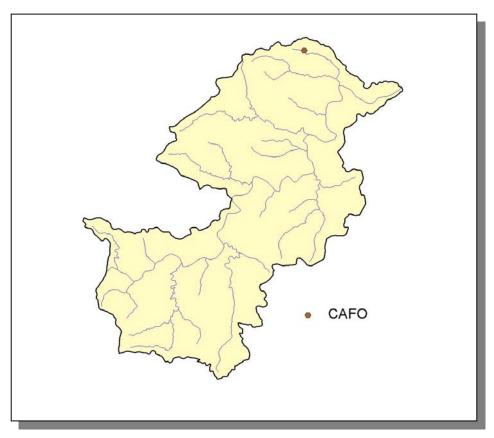


Figure 4-89. Location of Permits Issued in Subwatershed 0513010400203. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.iii.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)									
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep			
904	1,861	48	<5	648,297	61	8			

Table 4-66. Summary of Livestock Count Estimates in Subwatershed 051301040203. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS										
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep				
Fentress	8,058	17,259	430	7,290,026	474	729	79				
Morgan	4,697	8,853	251	1,501,559	194	83	35				
Scott	2,177	4,447	216	1,989,506	196	17	74				

Table 4-67. Summary of Livestock Count Estimates in Fentress, Morgan, and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE			
	Forest Land Timber Land		Growing Stock	Sawtimber		
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)		
Fentress	244.1	244.1	3.6	14.3		
Morgan	287.8	276.2	3.5	10.9		
Scott	300.3	300.3	5.5	21.4		

Table 4-68. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress, Morgan, and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.58
Grass (Hayland)	0.77
Legumes, Grass (Hayland)	0.39
Grass, Forbs, Legumes (Mixed Pasture)	0.19
Corn (Row Crops)	11.78
Soybeans (Row Crops)	6.00
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	0.22

Table 4-69. Annual Estimated Total Soil Loss in Subwatershed 051301040203.

4.2.B.iv. 051301040204 (Crooked Creek).

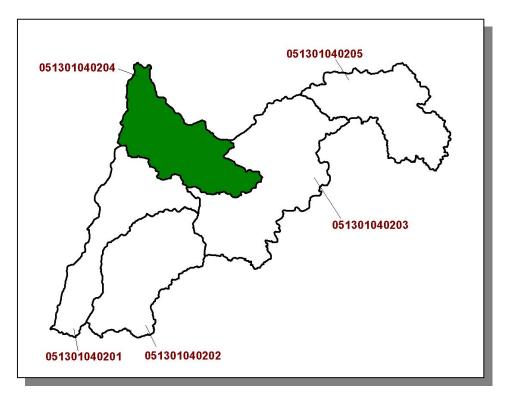


Figure 4-90. Location of Subwatershed 051301040204. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

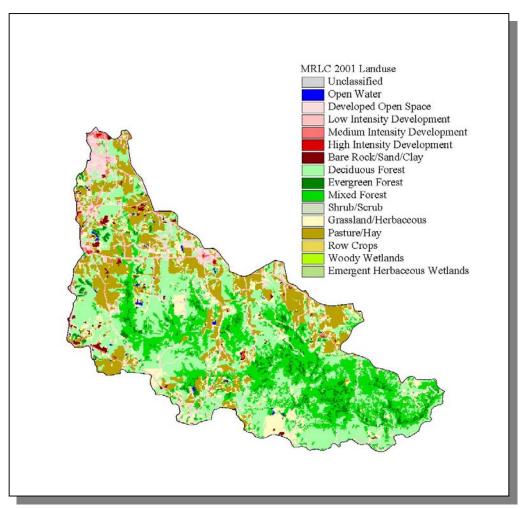


Figure 4-91. Illustration of Land Use Distribution in Subwatershed 051301040204.

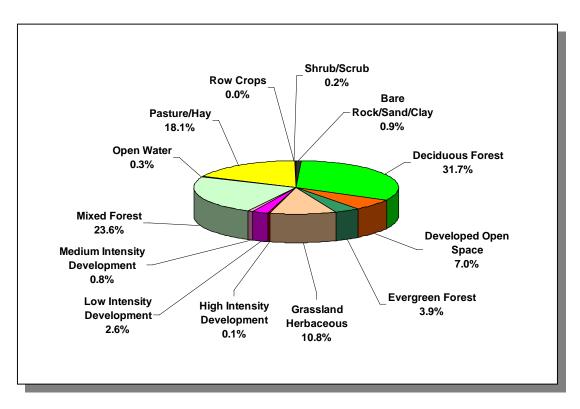


Figure 4-92. Land Use Distribution in Subwatershed 051301040204. More information is provided in Appendix IV.

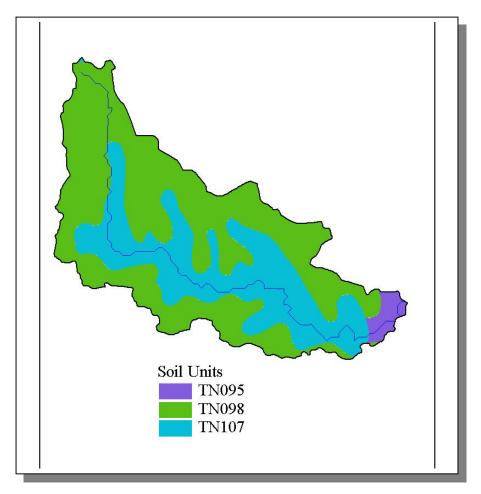


Figure 4-93. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040204.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	pН	SOIL TEXTURE	ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28

Table 4-70. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040204. The definition of "Hydrologic Group" is provided in Appendix IV.

104

	COUNTY POPULATION								
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)	
Fentress	14,669	15,920	16,625	6.52	956	1,037	1,083	13.3	

Table 4-71. Population Estimates in Subwatershed 051301040204.



Figure 4-94. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040204. More information is provided in Appendix IV.

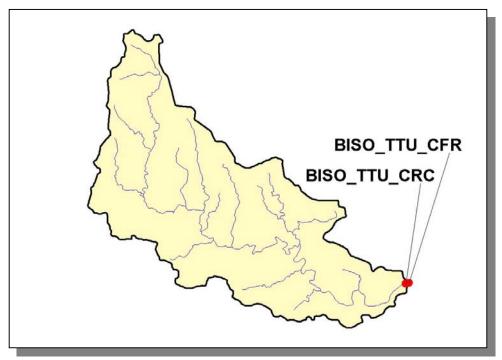


Figure 4-95. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040204. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.B.iv.a. Point Source Contributions.

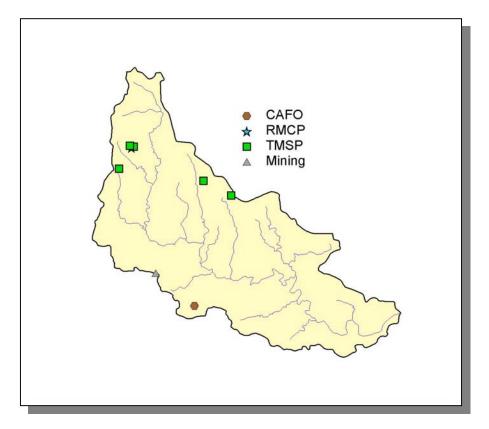


Figure 4-96. Location of Permits Issued in Subwatershed 051301040204. More information, including the names of facilities, is provided in Appendix IV.

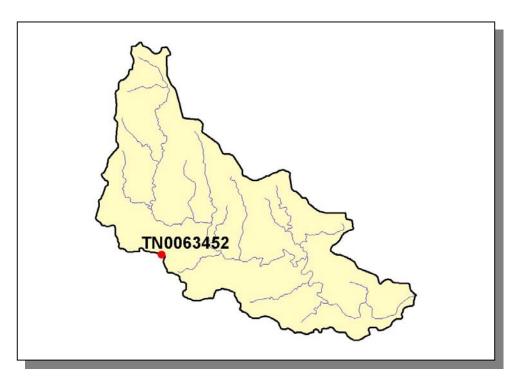


Figure 4-97. Location of Active Mining Sites in Subwatershed 051301040204. More information, including the names of mining operations, is provided in Appendix IV.

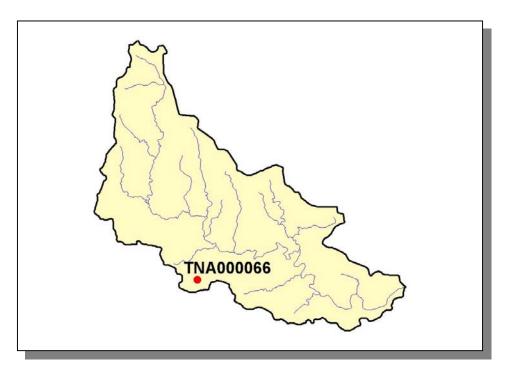


Figure 4-98. Location of Concentrated Animal Feeding Operations (CAFO) in Subwatershed 0513010204. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-99. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 051301040204. More information is provided in Appendix IV.

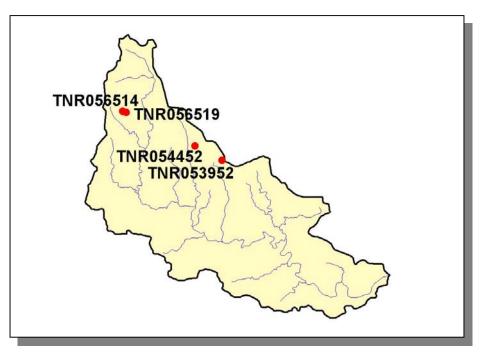


Figure 4-100. Location of TMSP Sites in Subwatershed 051301040204. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.iv.b. Nonpoint Source Contributions.

	LIVESTOCK (COUNTS)									
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep				
938	2,010	50	< 5	848,987	85	9				

Table 4-72. Summary of Livestock Count Estimates in Subwatershed 051301040204. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep			
Fentress	8,058	17,259	430	7,290,026	474	729	79			

Table 4-73. Summary of Livestock Count Estimates in Fentress County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE			
County	Forest Land Timber Land (thousand acres)		Growing Stock (million cubic feet)	Sawtimber (million board feet)		
County	(thousand acres) (thousand acres)		(million cubic leet)	(million board reet)		
Fentress	244.1	244.1	3.6	14.3		

Table 4-74. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.72
Legumes, Grass (Hayland)	0.56
Grass, Forbs, Legumes (Mixed Pasture)	0.27
Corn (Row Crops)	16.18
Soybeans (Row Crops)	6.00
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	0.40

Table 4-75. Annual Estimated Total Soil Loss in Subwatershed 051301040204.

4.2.B.v. 051301040205 (Lower Clear Fork).

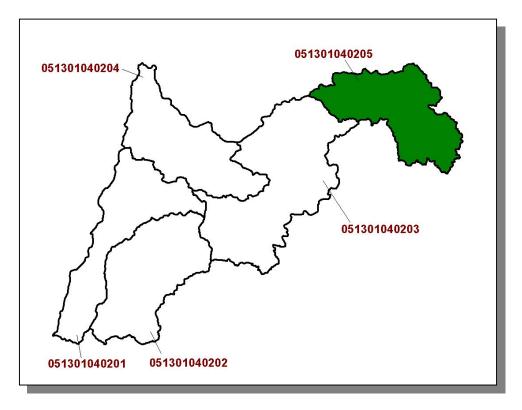


Figure 4-101. Location of Subwatershed 051301040205. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

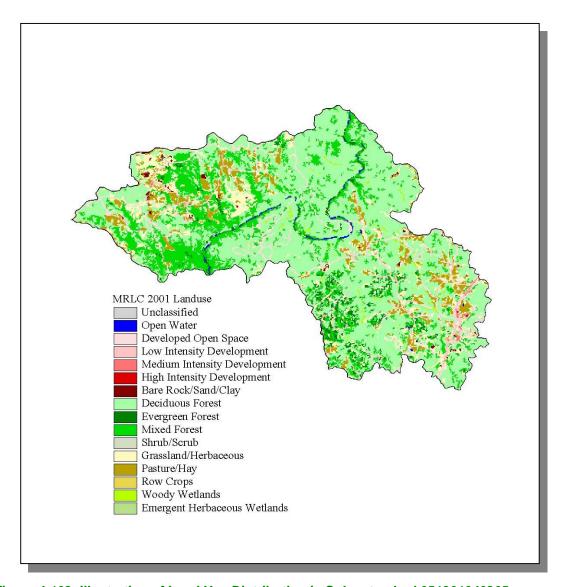


Figure 4-102. Illustration of Land Use Distribution in Subwatershed 051301040205.

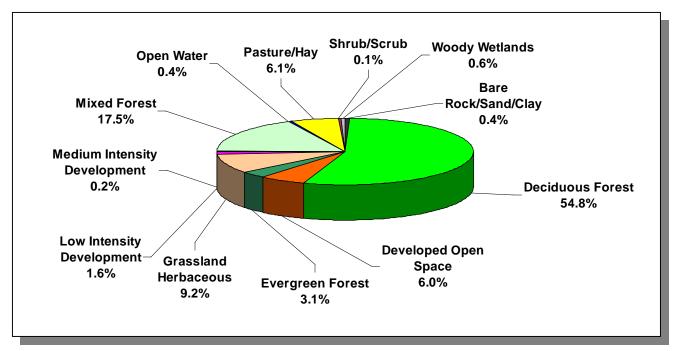


Figure 4-103. Land Use Distribution in Subwatershed 051301040205. More information is provided in Appendix IV.

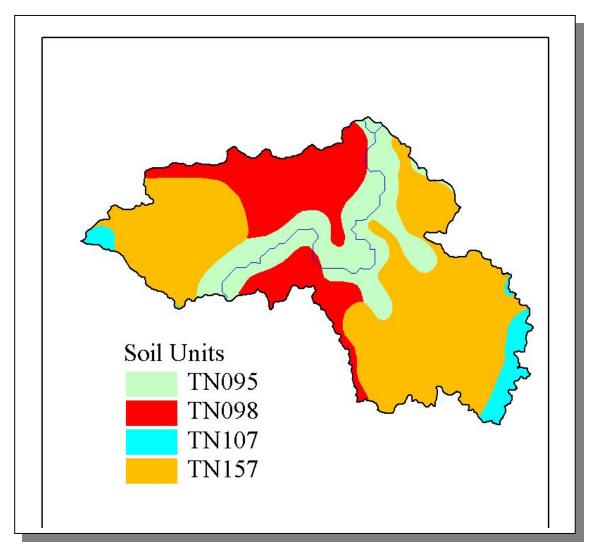


Figure 4-104. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040205.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	рН	SOIL TEXTURE	ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	C	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28

Table 4-76. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040205. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					IATED PO N WATER	PULATION SHED	
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Fentress	14,669	15,920	16,625	1.75	257	279	292	13.6
Scott	18,358	19,816	21,127	4.06	745	804	857	15.0
Total	33,027	35,736	37,752		1,002	1,083	1,149	14.7

Table 4-77. Population Estimates in Subwatershed 051301040205.

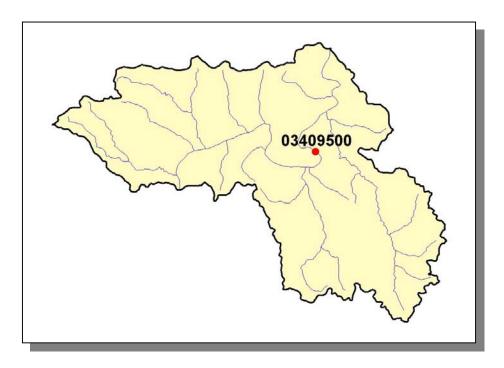


Figure 4-105. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040205. More information is provided in Appendix IV.

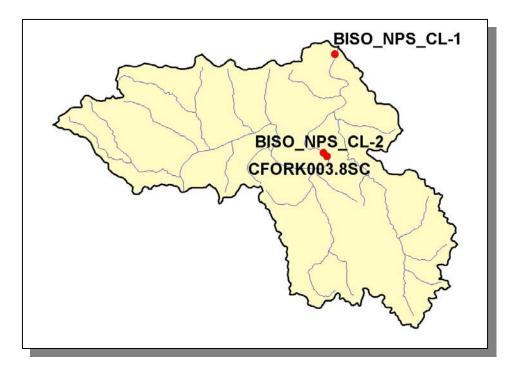


Figure 4-106. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040205. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.B.v.a. Point Source Contributions.

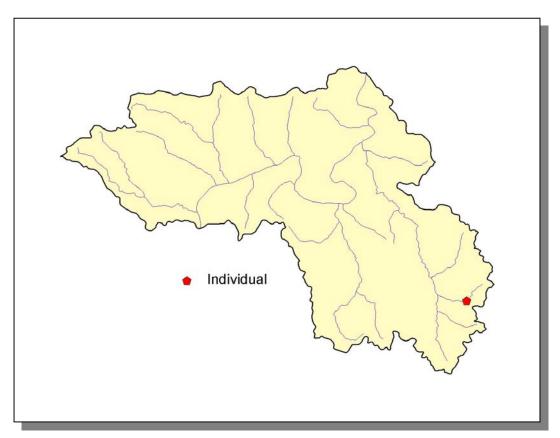


Figure 4-107. Location of Permits Issued in Subwatershed 051301040205. More information, including the names of facilities, is provided in Appendix IV.

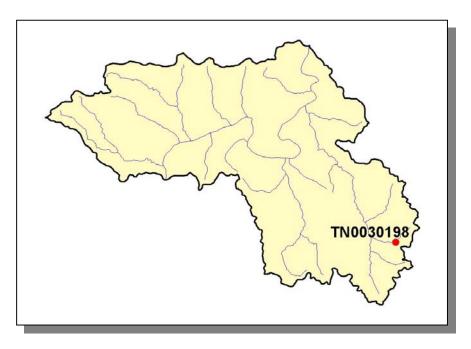


Figure 4-108. Location of Active NPDES Sites in Subwatershed 051301040205. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.v.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)										
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep				
173	360	14	<5	157.730	7	<5				

Table 4-78. Summary of Livestock Count Estimates in Subwatershed 051301040205. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS								
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep		
				((,,	- 3-			
Fentress	8,058	17,259	430	7,290,026	474	729	79		
Scott	2,177	4,447	216	1,989,506	196	17	74		

Table 4-79. Summary of Livestock Count Estimates in Fentress and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Fentress	244.1	244.1	3.6	14.3	
Scott	300.3	300.3	5.5	21.4	

Table 4-80. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.44
Legumes, Grass (Hayland)	0.56
Grass, Forbs, Legumes (Mixed Pasture)	0.49
Corn (Row Crops)	16.18
Soybeans (Row Crops)	6.00
Wheat (Close-Grown Cropland)	43.4
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	0.18

Table 4-81. Annual Estimated Total Soil Loss in Subwatershed 051301040205.

4.2.C. 0513010403.

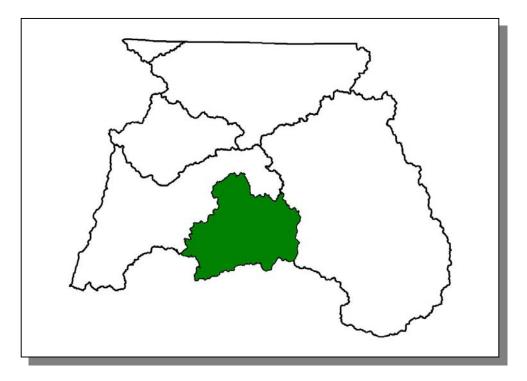


Figure 4-109. Location of Subwatershed 0513010403. All South Fork Cumberland River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.3.C.i. 051301040301 (Upper Whiteoak Creek).

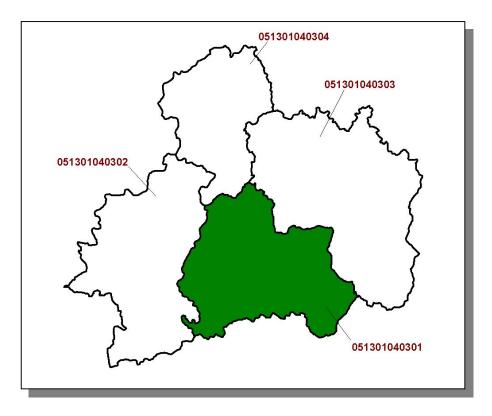


Figure 4-110. Location of Subwatershed 051301040301. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

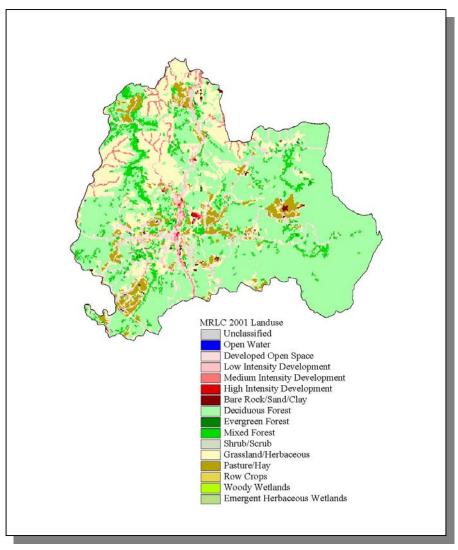


Figure 4-111. Illustration of Land Use Distribution in Subwatershed 051301040301.

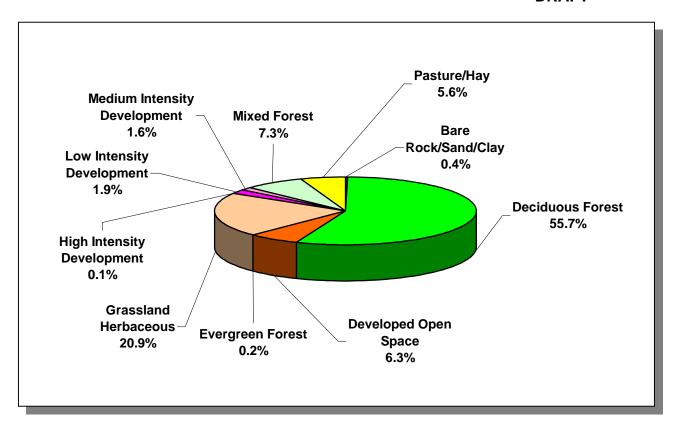


Figure 4-112. Land Use Distribution in Subwatershed 051301040301. More information is provided in Appendix IV.

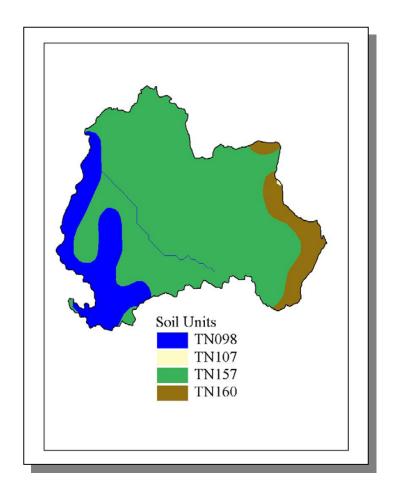


Figure 4-113. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040301.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	pН	SOIL TEXTURE	ERODIBILITY
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28
TN160	0.00	В	2.69	5.36	Loam	0.25

Table 4-82. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040301. The definition of "Hydrologic Group" is provided in Appendix IV.

124

	COUNTY POPULATION					IATED PC N WATER	PULATION SHED	
County	1990	1997	2000	Portion of Watershed (%)				% Change (1990-2000)
Morgan	17,300	18,521	19,757	5.06	876	938	1,000	14.2

Table 4-83. Population Estimates in Subwatershed 051301040301.



Figure 4-114. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040301. More information is provided in Appendix IV.

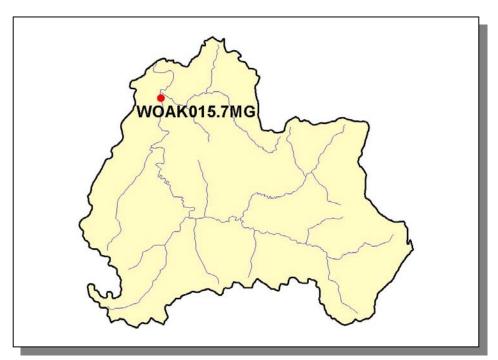


Figure 4-115. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040301. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.C.i.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.C.i.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)									
Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold) Hogs Sheep									
225	423	12	<5	71,795	4	<5			

Table 4-84. Summary of Livestock Count Estimates in Subwatershed 051301040301.According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep			
Morgan	4,697	8,853	251	1,501,559	194	83	35			

Table 4-85. Summary of Livestock Count Estimates in Morgan County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE		
County	Forest Land Timber Land (thousand acres)		Growing Stock Sawtimber (million cubic feet) (million board fe		
Morgan	287.8	276.2	3.5	10.9	

Table 4-86. Forest Acreage and Annual Removal Rates (1987-1994) in Morgan County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.42
Grass (Hayland)	0.77
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	0.11
Corn (Row Crops)	7.18
Farmsteads and Ranch Headquarters	0.04

Table 4-87. Annual Estimated Total Soil Loss in Subwatershed 051301040301.

4.3.C.ii. 051301040302 (Camp Creek).

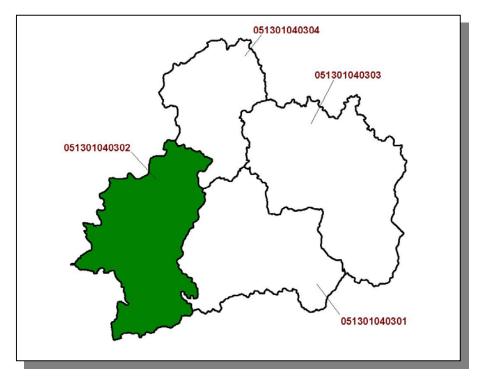


Figure 4-116. Location of Subwatershed 051301040302. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

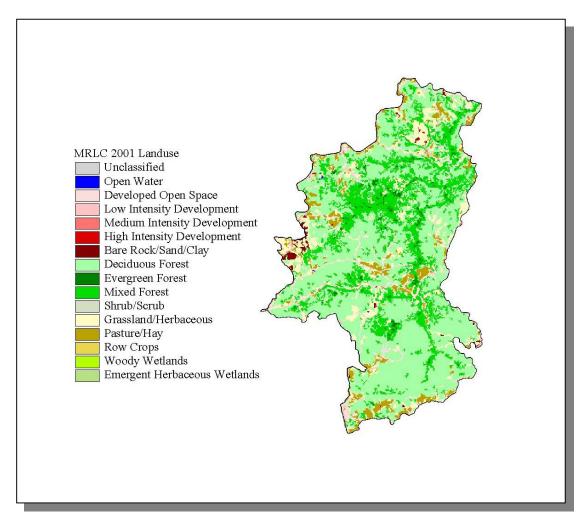


Figure 4-117. Illustration of Land Use Distribution in Subwatershed 051301040302.

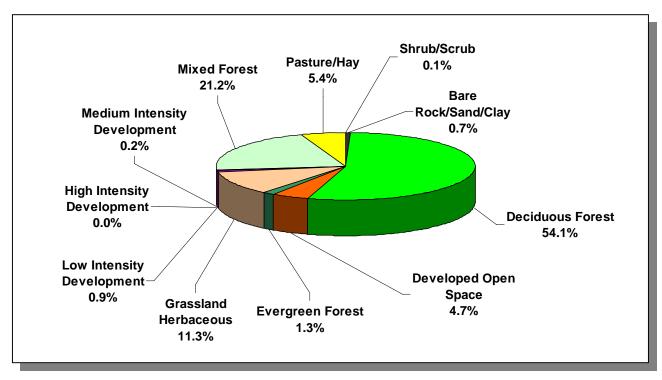


Figure 4-118. Land Use Distribution in Subwatershed 051301040302. More information is provided in Appendix IV.

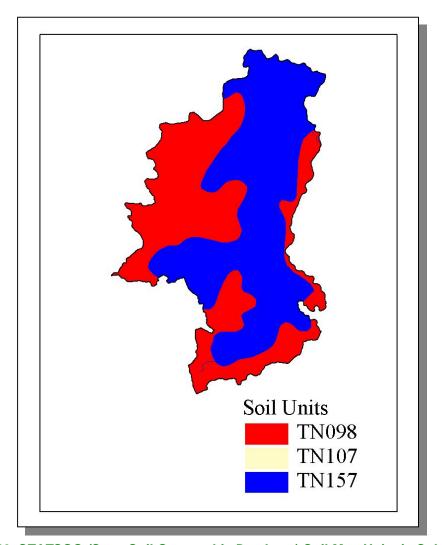


Figure 4-119. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040302.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28

Table 4-88. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040302. The definition of "Hydrologic Group" is provided in Appendix IV.

131

	COUNTY POPULATION					IATED PO N WATER	PULATION SHED	
County				Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Morgan	17,300	18,521	19,757	5.1	883	945	1,008	14.2

Table 4-89. Population Estimates in Subwatershed 051301040302.



Figure 4-120. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040302. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.C.ii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.C.ii.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)										
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens (Broilers Sold)	Hogs	Sheep				
265	500	14	<5	84,750	5	<5				

Table 4-90. Summary of Livestock Count Estimates in Subwatershed 051301040302. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
County Beef Cow Cattle Milk Cow (Broilers Sold) Chickens (Layers) Hogs						Hogs	Sheep			
Morgan	4,697	8,853	251	1,501,559	194	83	35			

Table 4-91. Summary of Livestock Count Estimates in Morgan County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
County	Forest Land Timber Land (thousand acres)		Growing Stock (million cubic feet)	Sawtimber (million board feet)	
Morgan	287.8	276.2	3.5	10.9	

Table 4-92. Forest Acreage and Annual Removal Rates (1987-1994) in Morgan County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.42
Grass (Hayland)	0.77
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	0.11
Corn (Row Crops)	7.18
Farmsteads and Ranch Headquarters	0.04

Table 4-93. Annual Estimated Total Soil Loss in Subwatershed 051301040302.

4.3.C.iii. 051301040303 (Black Wolf Creek).

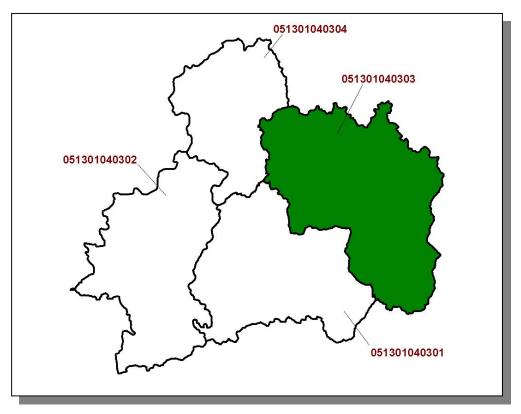


Figure 4-121. Location of Subwatershed 051301040303. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

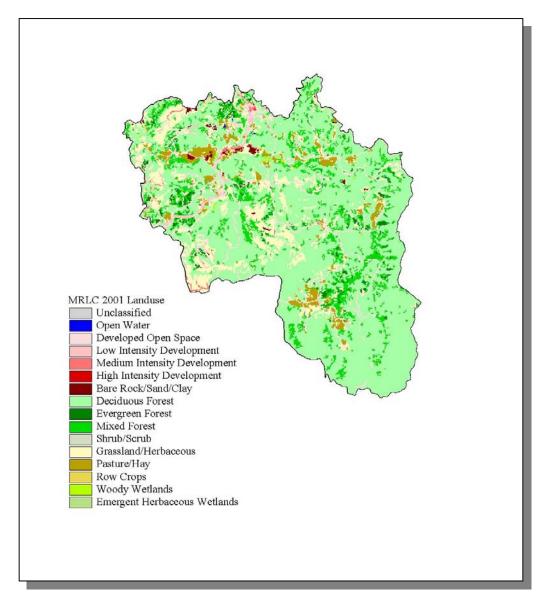


Figure 4-122. Illustration of Land Use Distribution in Subwatershed 051301040303.

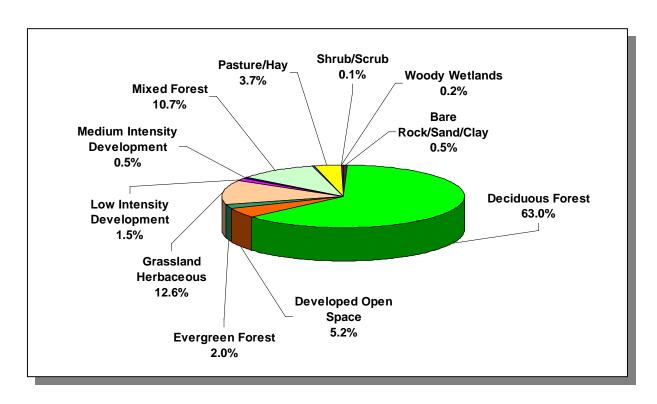


Figure 4-123. Land Use Distribution in Subwatershed 051301040303. More information is provided in Appendix IV.

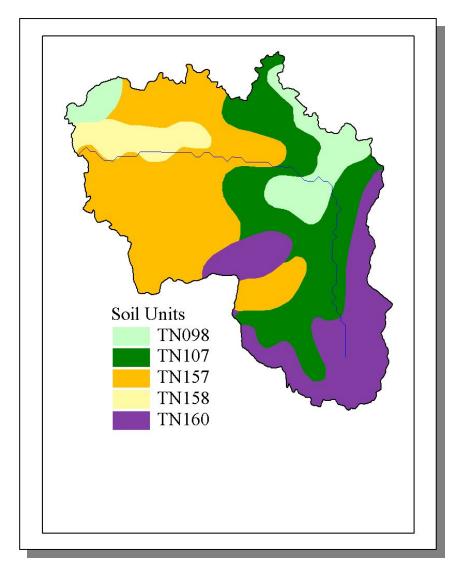


Figure 4-124. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040303.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	рН	SOIL TEXTURE	ERODIBILITY
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28
TN158	22.00	С	1.89	5.14	Silty Loam	0.29
TN160	0.00	В	2.69	5.36	Loam	0.25

Table 4-94. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040303. The definition of "Hydrologic Group" is provided in Appendix IV.

137

	COUNTY POPULATION					IATED PC N WATER	PULATION SHED	
County	1990 1997 2000			Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
County	1000	1001	2000	Traterenea (70)	1000	1001	2000	(1000 2000)
Morgan	17,300	18,521	19,757	2.14	370	396	423	14.3
Scott	18,358	19,816	21,127	4.18	767	828	883	15.1
Total	35,658	38,337	40,884		1,137	1,224	1,306	14.9

Table 4-95. Population Estimates in Subwatershed 051301040303.

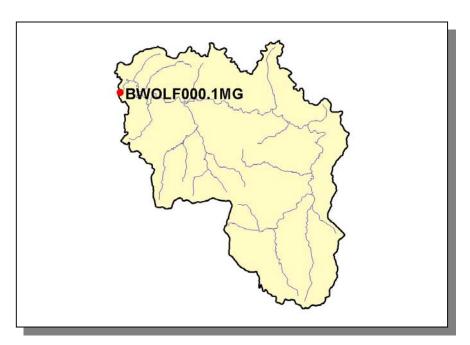


Figure 4-125. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040303. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.C.iii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.C.iii.b. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)									
Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold) Hogs Sheep									
184 359 14 <5 106,571 <5						4			

Table 4-96. Summary of Livestock Count Estimates in Subwatershed 051301040303. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS								
County Beef Cow Cattle Milk Cow (Broilers Sold) (Layers) Hogs Sheep								
Morgan	4,697	8,853	251	1,501,559	194	83	35	
Scott	2,177	4,447	216	1,989,506	196	17	74	

Table 4-97. Summary of Livestock Count Estimates in Morgan and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Morgan	287.8	276.2	3.5	10.9	
Scott	300.3	300.3	5.5	21.4	

Table 4-98. Forest Acreage and Annual Removal Rates (1987-1994) in Morgan and Scott Counties.

CROPS	TONS/ACRE/YEAR			
Grass (Pastureland)	0.36			
Grass (Hayland)	0.77			
Legumes, Grass (Hayland)	0.21			
Grass, Forbs, Legumes (Mixed Pasture)	0.43			
Corn (Row Crops)	7.18			
Farmsteads and Ranch Headquarters	0.07			

Table 4-99. Annual Estimated Total Soil Loss in Subwatershed 051301040303.

4.3.C.iv. 051301040304 (Lower Whiteoak Creek).

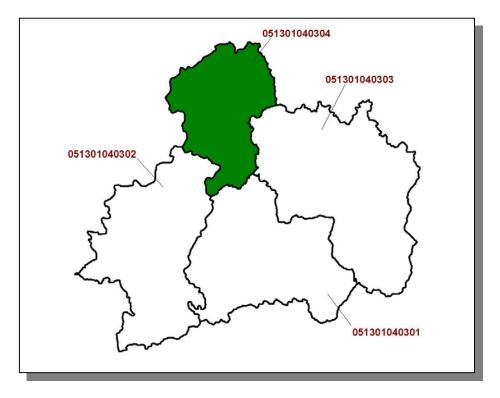


Figure 4-126. Location of Subwatershed 051301040304. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

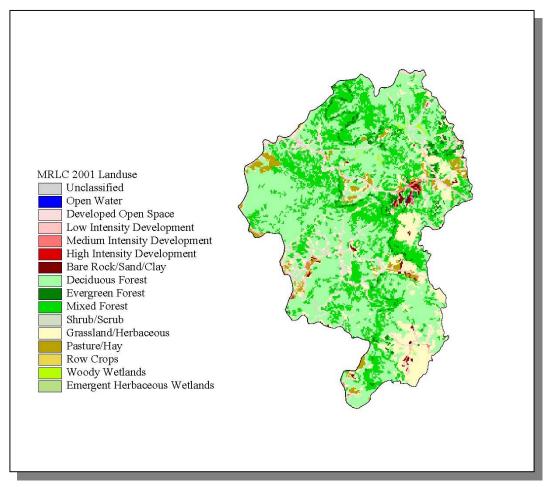


Figure 4-127. Illustration of Land Use Distribution in Subwatershed 051301040304.

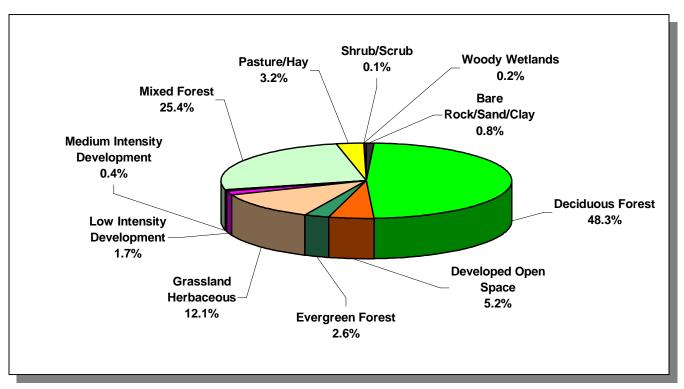


Figure 4-128. Land Use Distribution in Subwatershed 051301040304. More information is provided in Appendix IV.

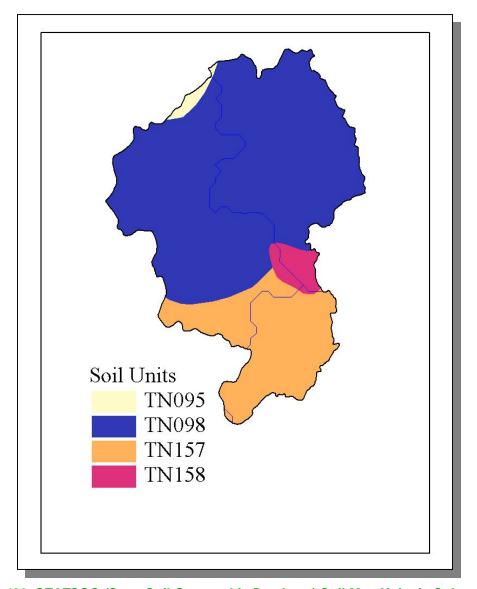


Figure 4-129. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040304.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN157	0.00	В	2.38	4.62	Loam	0.28
TN158	22.00	С	1.89	5.14	Silty Loam	0.29

Table 4-100. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040304. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION				ESTIMATED POPULATION IN WATERSHED			
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Morgan	17,300	18,521	19,757	2.35	406	435	464	14.3
Scott	18,358	19,816	21,127	0.88	161	174	185	14.9
Total	35,658	38,337	40,884		567	609	649	14.5

Table 4-101. Population Estimates in Subwatershed 051301040304.

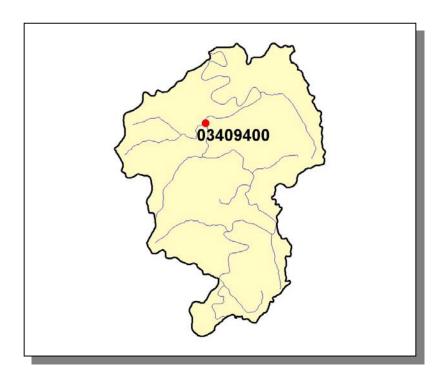


Figure 4-130. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040304. More information is provided in Appendix IV.

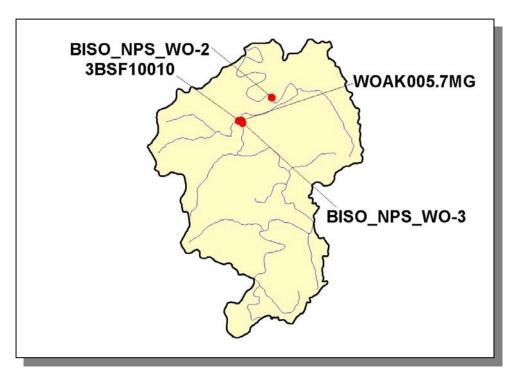


Figure 4-131. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040304. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.C.iv.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.C.iv.b. Nonpoint Source Contributions.

	LIVESTOCK COUNTS									
Beef Cow Cattle Milk Cow Chickens (Broilers Sold) Hogs Sheep										
143	273	9	59,300	<5	<5					

Table 4-102. Summary of Livestock Count Estimates in Subwatershed 051301040304. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS											
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep					
Fentress	8,058	17,259	430	7,290,026	474	729	79					
Morgan	4,697	8,853	251	1,501,559	194	83	35					
Scott	2,177	4,447	216	1,989,506	196	17	74					

Table 4-103. Summary of Livestock Count Estimates in Fentress, Morgan, and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land	Forest Land Timber Land		Sawtimber	
County	(thousand acres)	(thousand acres) (thousand acres)		(million board feet)	
Fentress	244.1	244.1	3.6	14.3	
Morgan	287.8	276.2	3.5	10.9	
Scott	300.3	300.3	5.5	21.4	

Table 4-104. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress, Morgan, and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.40
Grass (Hayland)	0.77
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	0.24
Corn (Row Crops)	7.18
Soybeans (Row Crops)	6.00
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	0.05

Table 4-105. Annual Estimated Total Soil Loss in Subwatershed 051301040304.

4.2.D. 0513010404.

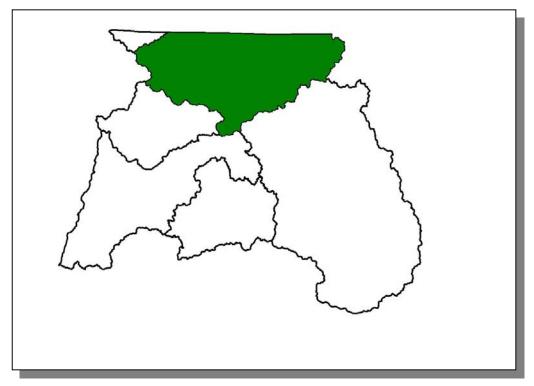


Figure 4-132. Location of Subwatershed 0513010404. All South Fork Cumberland River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.3.D.i. 051301040401 (Big South Fork).

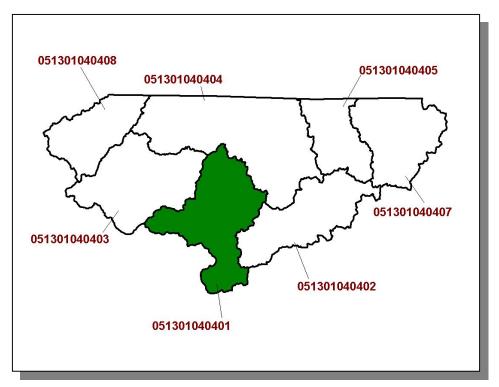


Figure 4-133. Location of Subwatershed 051301040401. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

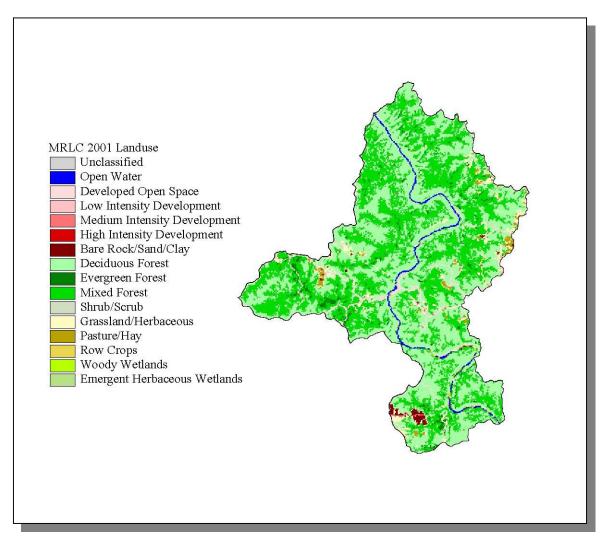


Figure 4-134. Illustration of Land Use Distribution in Subwatershed 051301040401.

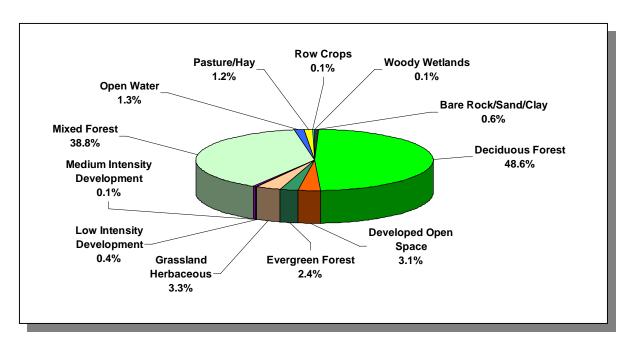


Figure 4-135. Land Use Distribution in Subwatershed 051301040401. More information is provided in Appendix IV.

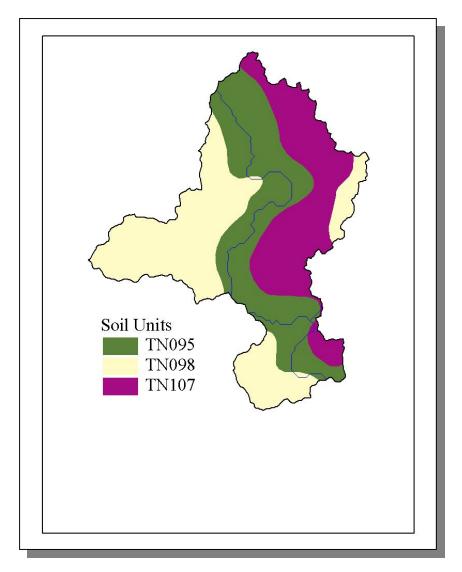


Figure 4-136. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040401.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	рН	SOIL TEXTURE	ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	О	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28

Table 4-106. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040401. The definition of "Hydrologic Group" is provided in Appendix IV.

152

	COUNTY POPULATION					IATED PO N WATER	PULATION SHED	
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Fentress	14,669	15,920	16,625	0.45	66	72	75	13.6
Scott	18,358	19,816	21,127	5.56	1,020	1,101	1,174	15.1
Total	33,027	35,736	37,752		1,086	1,173	1,249	15.0

Table 4-107. Population Estimates in Subwatershed 051301040401.

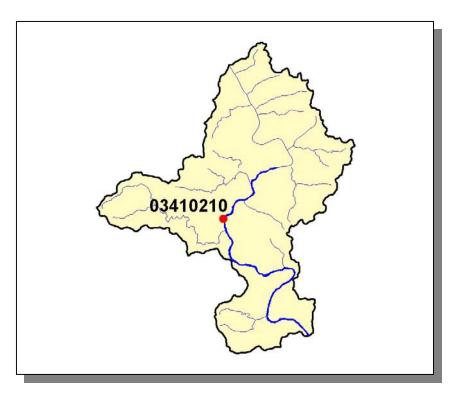


Figure 4-137. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040401. More information is provided in Appendix IV.

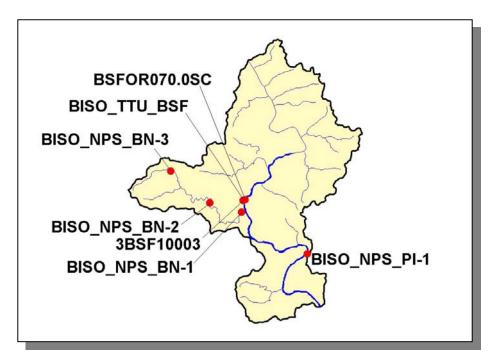


Figure 4-138. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040401. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.D.i.a. Point Source Contributions.

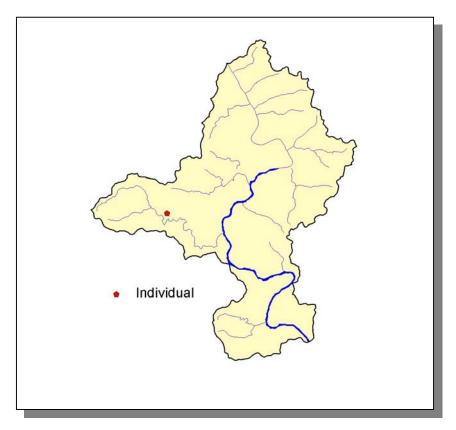


Figure 4-139. Location of Permits Issued in Subwatershed 051301040401. More information, including the names of facilities, is provided in Appendix IV.

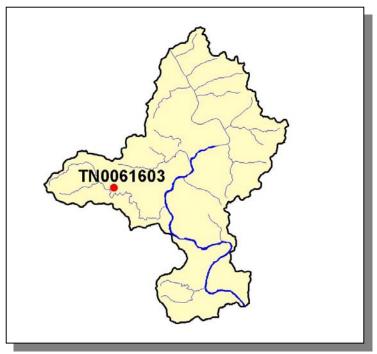


Figure 4-140. Location of Active NPDES Sites in Subwatershed 051301040401. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS										
Beef Cow Cattle Milk Cow Chickens (Broilers Sold) Sheep										
45	93	<5	41,516	<5						

Table 4-108. Summary of Livestock Count Estimates in Subwatershed 051301040401. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS										
Chickens Chickens											
County	Beef Cow	Cattle	Milk Cow	(Broilers Sold)	(Layers)	Hogs	Sheep				
Fenteess	8,058	17,259	430	7,290,026	474	729	79				
Scott	2,177	4,447	216	1,989,506	196	17	74				

Table 4-109. Summary of Livestock Count Estimates in Fentress and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Fentress	244.1	244.1	3.6	14.3	
Scott	300.3	300.3	5.5	21.4	

Table 4-110. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.35
Legumes, Grass (Hayland)	0.56
Grass, Forbs, Legumes (Mixed Pasture)	0.56
Corn (Row Crops)	16.18
Soybeans (Row Crops)	6.00
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	0.11

Table 4-111. Annual Estimated Total Soil Loss in Subwatershed 0604000401.

4.3.D.ii. 051301040402 (Pine Creek).

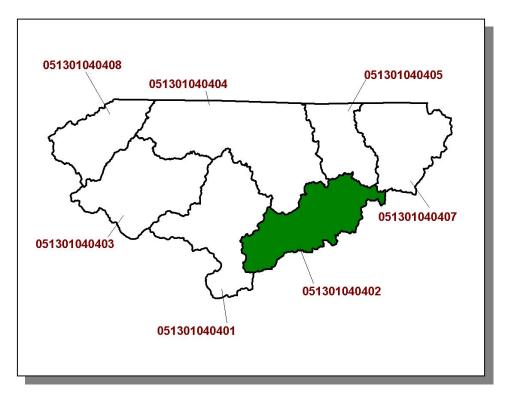


Figure 4-141. Location of Subwatershed 051301040402. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

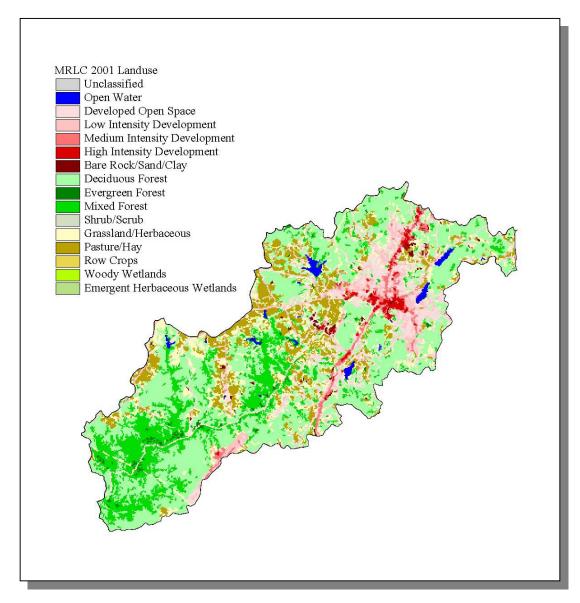


Figure 4-142. Illustration of Land Use Distribution in Subwatershed 051301040402.

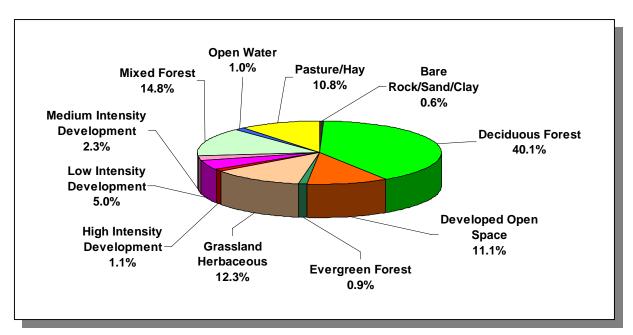


Figure 4-143. Land Use Distribution in Subwatershed 051301040402. More information is provided in Appendix IV.

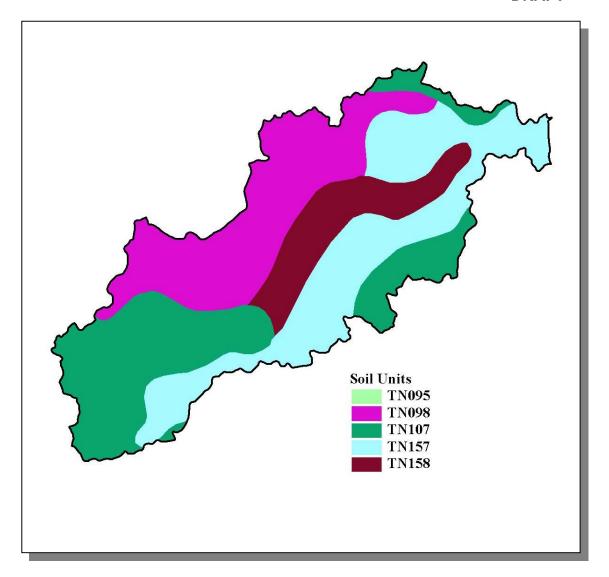


Figure 4-144. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040402.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	5.00	С	3.98	4.82	Loam	0.32
TN100	0.00	В	1.14	3.35	Silty Loam	0.21
TN107	5.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28

Table 4-112. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040402. The definition of "Hydrologic Group" is provided in Appendix IV.

161

	COUNTY POPULATION					IATED PC N WATER	PULATION SHED	
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Scott	18,358	19,816	21,127	4.97	912	985	1,050	15.1

Table 4-113. Population Estimates in Subwatershed 051301040402

			NUMBER OF HOUSING UNITS					
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other		
Oneida	Scott	3,502	1,506	1,098	393	15		

Table 4-114. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 051301040402.

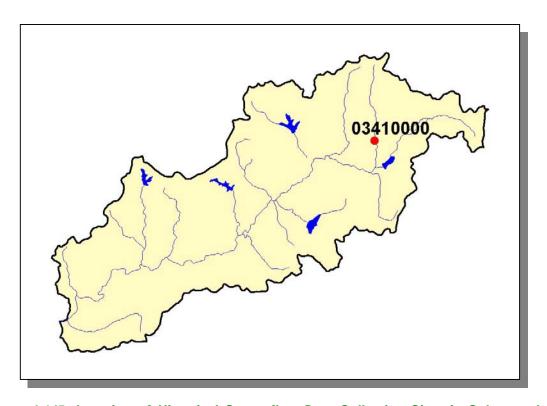


Figure 4-145. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301040402. More information is provided in Appendix IV.

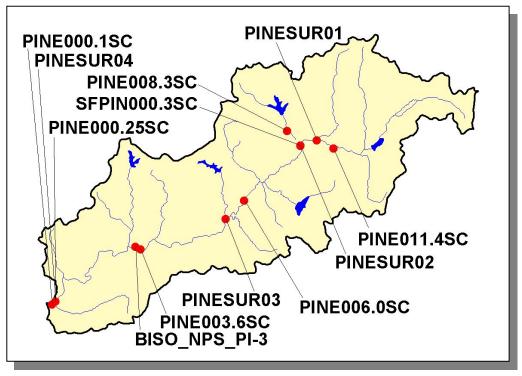


Figure 4-146. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040402. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.D.ii.a. Point Source Contributions.

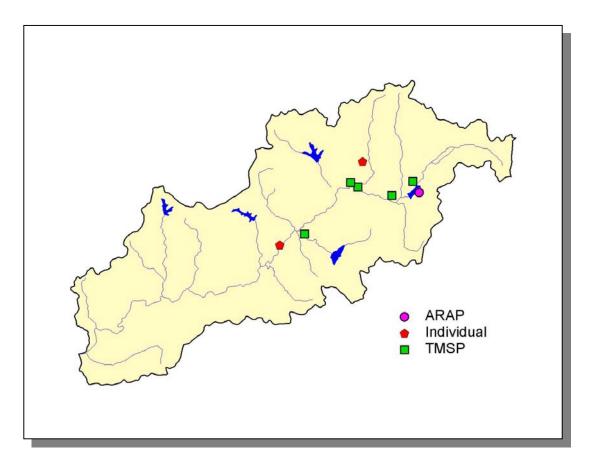


Figure 4-147. Location of Permits Issued in Subwatershed 051301040402. More information, including the names of facilities, is provided in Appendix IV.

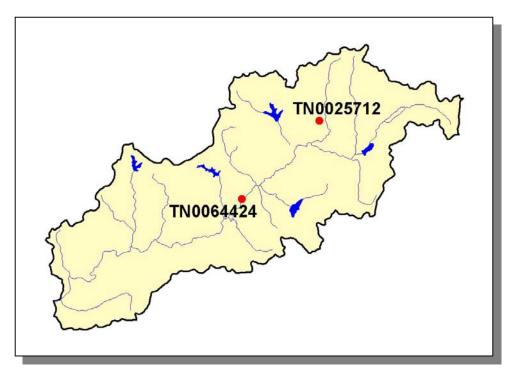


Figure 4-148. Location of Active NPDES Sites in Subwatershed 051301040402. More information, including the names of facilities, is provided in Appendix IV.

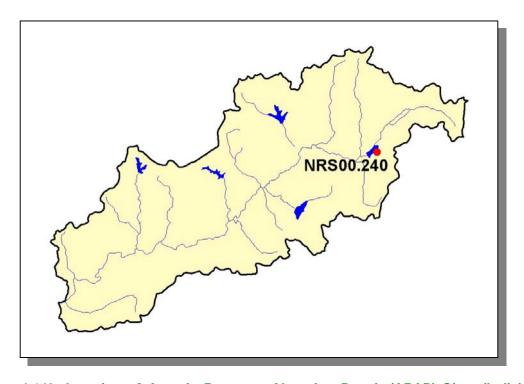


Figure 4-149. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 051301040402. More information is provided in Appendix IV.

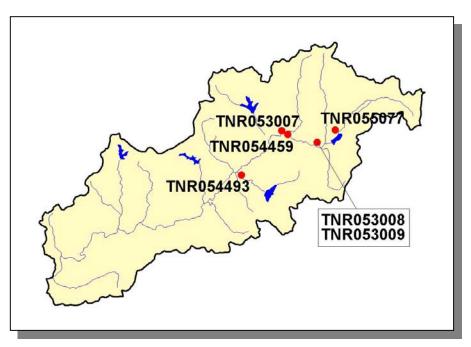


Figure 4-150. Location of TMSP Sites in Subwatershed 051301040402. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.ii.a.i. Dischargers to Water Bodies Listed on the 2004 303(d) List

There are two NPDES facilities discharging to water bodies listed on the 2004 303(d) list in Subwatershed 051301040402:

- TN0025712 (HBD Industries) discharges to Litton Fork Pine Creek
 @ RM 0.1
- TN0064424 (Oneida STP) discharges to Pine Creek @ RM 7.2

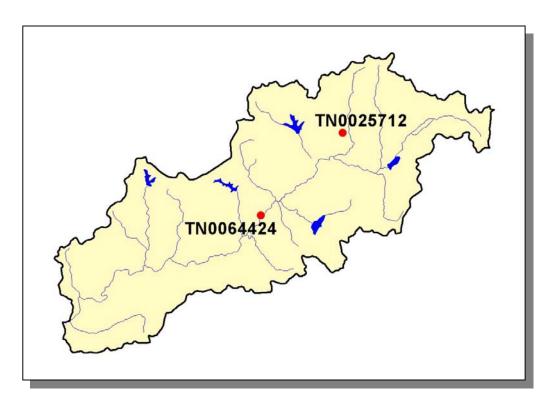


Figure 4-151. Location of NPDES Dischargers to Water Bodies Listed on the 2004 303(d) List in Subwatershed 051301040402. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	NO_3	Zn	Hg	Cu	Pb	Ni	Cd	Мо	As	Se	FLOW	TEMPERATURE
TN0025712											Χ	Χ
TN0064424	Χ	Х	Χ	Х	Χ	Χ	Х	Х	Х	Χ		

Table 4-115. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 051301040402.

PERMIT #	WET	CBOD ₅	NH ₃	TRC	TSS	SETTLEABLE SOLIDS	DO	рН	CN	Р	OIL and GREASE
TN0025712					Х			Χ			X
TN0064424	Х	Χ	Х	Х	Х	X	Х	Χ	Х	Х	

Table 4-116. Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 051301040402. WET, Whole Effluent Toxicity; CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids.

		FECAL
PERMIT #	E. coli	COLIFORM
TN0064424	Х	Χ

Table 4-117. Bacteria Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 051301040402.

4.2.D.ii.b. Nonpoint Source Contributions.

There are no known nonpoint source contributions in this subwatershed.

4.3.D.iii. 051301040403 (Station Camp Creek).

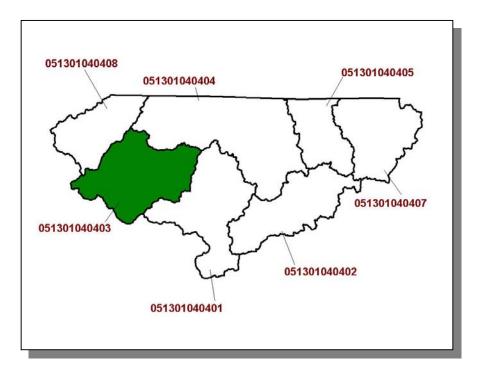


Figure 4-152. Location of Subwatershed 051301040403. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

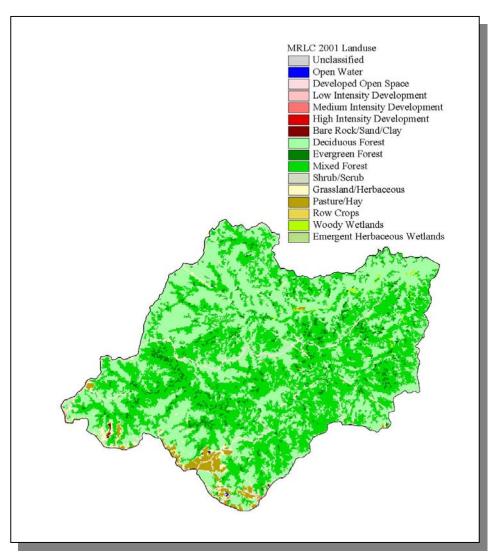


Figure 4-153. Illustration of Land Use Distribution in Subwatershed 051301040403.

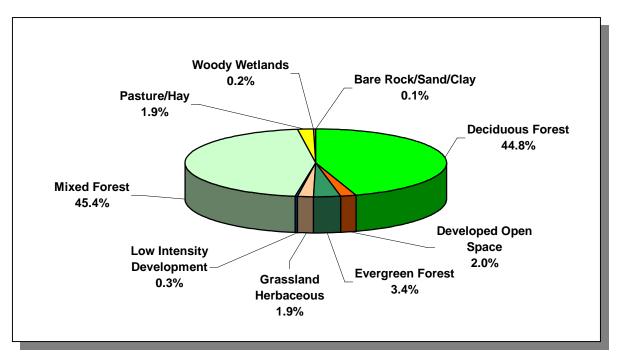


Figure 4-154. Land Use Distribution in Subwatershed 051301040403. More information is provided in Appendix IV.

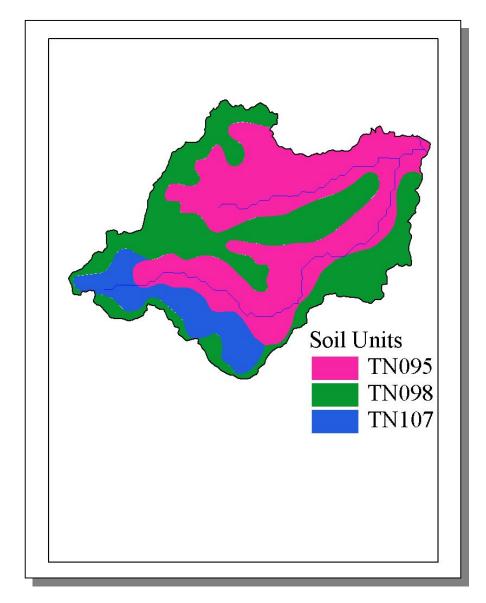


Figure 4-155. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040403.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	рН	SOIL TEXTURE	ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28

Table 4-118. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040403. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					IATED PC N WATER		
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Fentress	14,669	15,920	16,625	3.1	455	494	516	13.4
Pickett	4,548	4,631	4,945	2.8	127	130	138	8.7
Scott	18,358	19,816	21,127	2.11	387	418	446	15.2
Total	37,575	40,367	42,697		969	1,042	1,100	13.5

Table 4-119. Population Estimates in Subwatershed 051301040403.

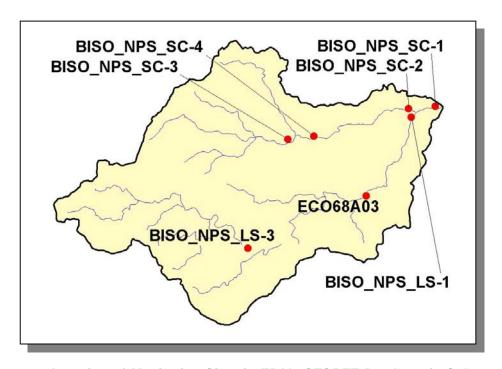


Figure 4-156. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040403. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.D.iii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.iii.b. Nonpoint Source Contributions.

	LIVESTOCK COUNTSS									
Beef Cow	Hogs	Sheep								
84	180	5	76,233	7	<5					

Table 4-120. Summary of Livestock Count Estimates in Subwatershed 051301040403. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS										
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep				
Fentress	8,058	17,259	430	7,290,026	474	729	79				
Pickett	5,986	10,864	19		285	99					
Scott	2,177	4,447	216	1,989,506	196	17	74				

Table 4-121. Summary of Livestock Count Estimates in Fentress, Pickett, and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE			
	Forest Land	Timber Land	Growing Stock	Sawtimber		
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)		
Fentress	244.1	244.1	3.6	14.3		
Pickett	68.4	68.4	0.2	0.6		
Scott	300.3	300.3	5.5	21.4		

Table 4-122. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress, Pickett, and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.64
Grass (Hayland)	0.11
Legumes, Grass (Hayland)	0.44
Grass, Forbs, Legumes (Mixed Pasture)	0.45
Corn (Row Crops)	16.18
Soybeans (Row Crops)	6.00
Tobacco (Row Crops)	23.18
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	1.43

Table 4-123. Annual Estimated Total Soil Loss in Subwatershed 051301040403.

4.3.D.iv. 051301040404 (Big South Fork).

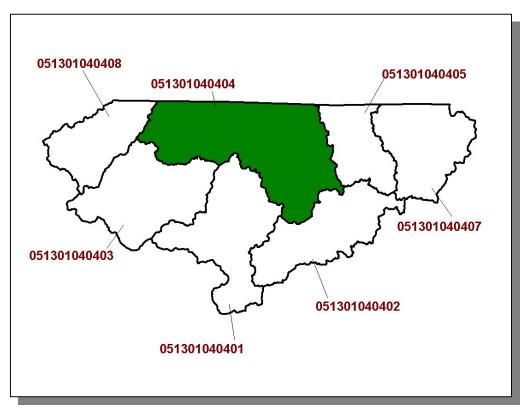


Figure 4-157. Location of Subwatershed 051301040404. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

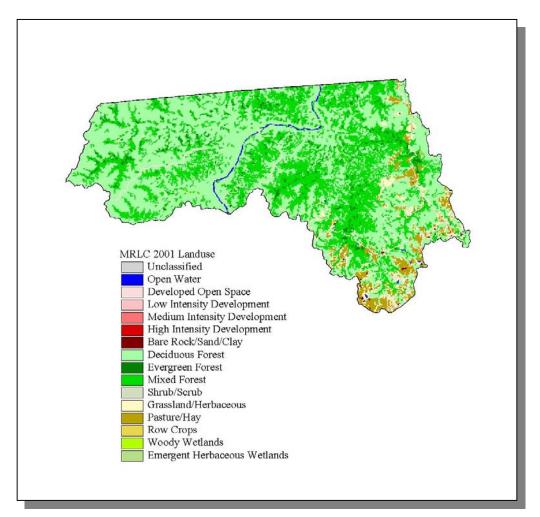


Figure 4-158. Illustration of Land Use Distribution in Subwatershed 051301040404.

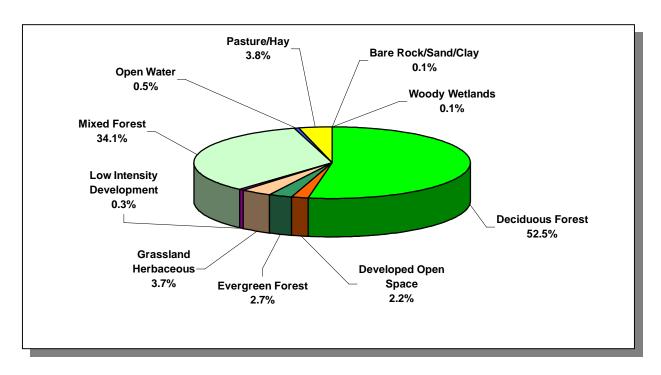


Figure 4-159. Land Use Distribution in Subwatershed 051301040404. More information is provided in Appendix IV.

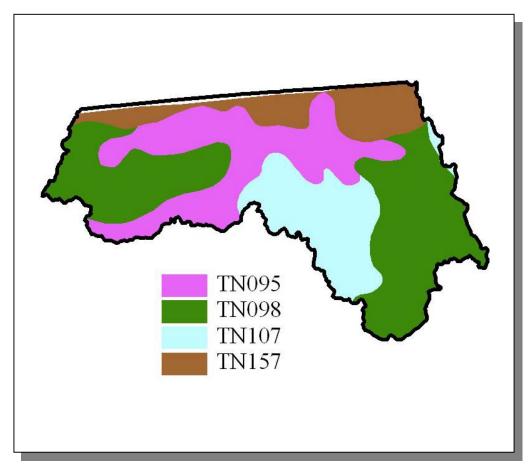


Figure 4-160. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040404.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28

Table 4-124. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040404. The definition of "Hydrologic Group" is provided in Appendix IV.

179

	COUNTY POPULATION									
County	1990 1997 2000		Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)			
Scott	18,358	19,816	21,127	9.18	1,686	1,820	1,940	15.1		

Table 4-125. Population Estimates in Subwatershed 051301040404.

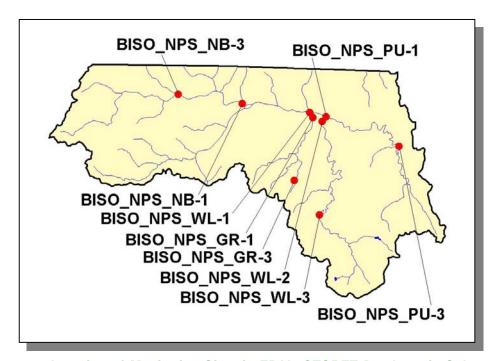


Figure 4-161. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040404. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.D.iv.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.iv.b. Nonpoint Source Contributions.

	LIVESTOCK (COUNTS)										
Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold) Hogs Shee											
209 426 21 <5 190,549 <5 7											

Table 4-126. Summary of Livestock Count Estimates in Subwatershed 051301040404. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep			
Scott	2.177	4,447	216	1,989,506	196	17	74			

Table 4-127. Summary of Livestock Count Estimates in Scott County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE			
County	Forest Land Timber Land (thousand acres)		Growing Stock Sawtimber (million cubic feet)			
Scott	300.3	300.3	5.5	21.4		

Table 4-128. Forest Acreage and Annual Removal Rates (1987-1994) in Scott County.

CROPS	TONS/ACRE/YEAR
Grass (Hayland)	0.33
Grass, Forbs, Legumes (Mixed Pasture)	0.58
Farmsteads and Ranch Headquarters	0.09

Table 4-129, Annual Estimated Total Soil Loss in Subwatershed 0604000401.

4.3.D.v. 051301040405 (Bear Creek).

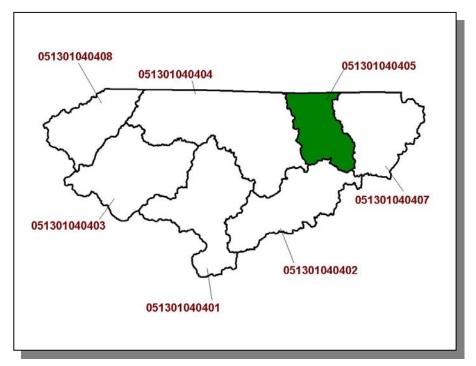


Figure 4-162. Location of Subwatershed 051301040405. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

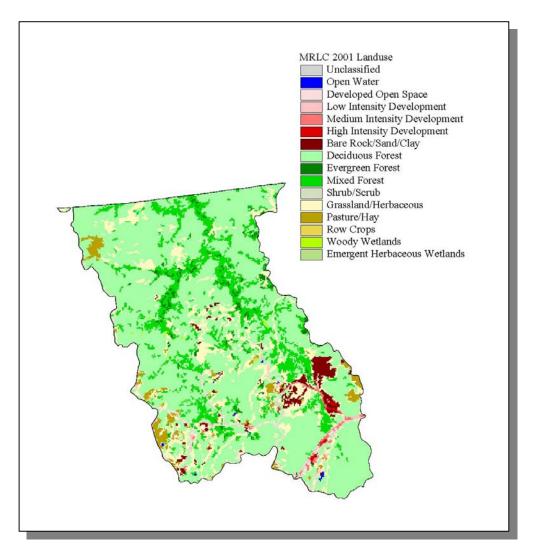


Figure 4-163. Illustration of Land Use Distribution in Subwatershed 051301040405.

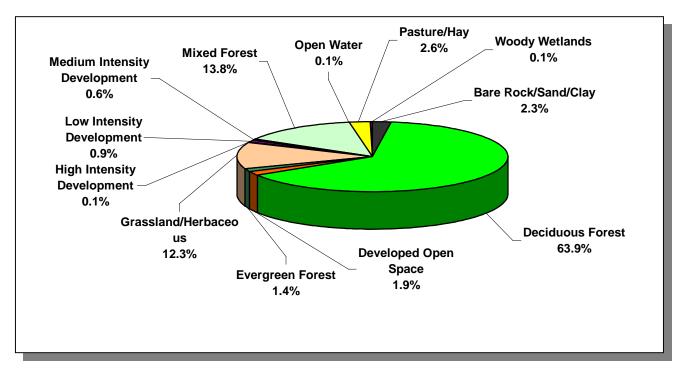


Figure 4-164. Land Use Distribution in Subwatershed 051301040405. More information is provided in Appendix IV.

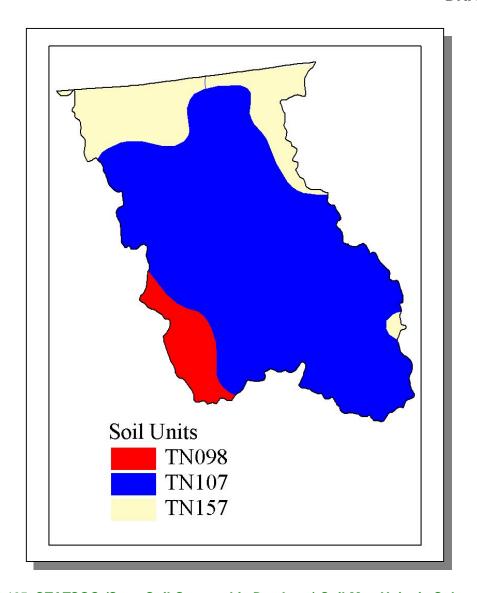


Figure 4-165. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040405.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28

Table 4-130. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040405. The definition of "Hydrologic Group" is provided in Appendix IV.

185

	COUNTY POPULATION					NATED PC	PULATION SHED	
County	1990	1997	2000	Portion of Watershed (%)				% Change (1990-2000)
Scott	18,358	19,816	21,127	3.0	551	594	634	15.1

Table 4-131. Population Estimates in Subwatershed 051301040405.



Figure 4-166. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040405. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.D.v.a. Point Source Contributions.

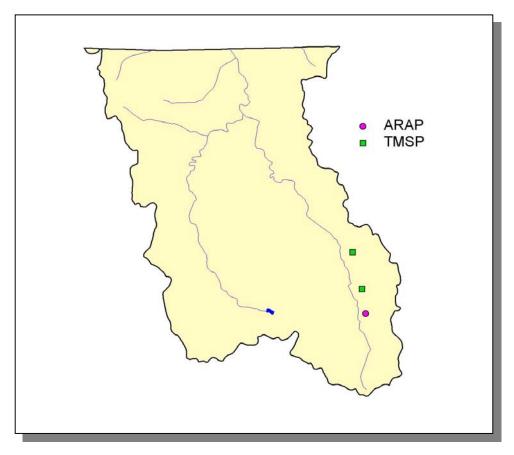


Figure 4-167. Location of Permits Issued in Subwatershed 051301040405. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-168. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 051301040405. More information is provided in Appendix IV.

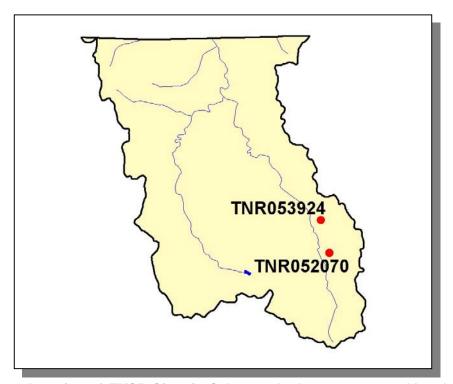


Figure 4-169. Location of TMSP Sites in Subwatershed 051301040405. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.v.b. Nonpoint Source Contributions.

	LIVESTOCK COUNTS									
Beef Cow Cattle Milk Cow Chickens (Broilers Sold) Hogs Sheep										
44 90 <5 40,185 0 <5										

Table 4-132. Summary of Livestock Count Estimates in Subwatershed 051301040405. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep			
Scott	2,177	4,447	216	1,989,506	196	17	74			

Table 4-133. Summary of Livestock Count Estimates in Scott County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE			
	Forest Land	Timber Land	Growing Stock	Sawtimber		
County	(thousand acres)	(thousand acres) (thousand acres)		(million board feet)		
Scott	300.3	300.3	5.5	21.4		

Table 4-134. Forest Acreage and Annual Removal Rates (1987-1994) in Scott County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.33
Grass, Forbs, Legumes (Mixed Pasture)	0.58
Farmsteads and Ranch Headquarters	0.09

Table 4-135. Annual Estimated Total Soil Loss in Subwatershed 051301040405.

4.3.D.vi. 051301040407 (Roaring Paunch Creek).

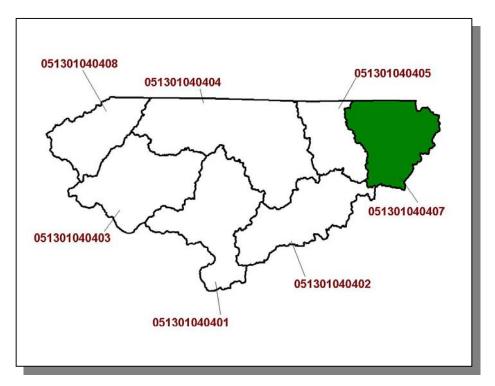


Figure 4-170. Location of Subwatershed 051301040407. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

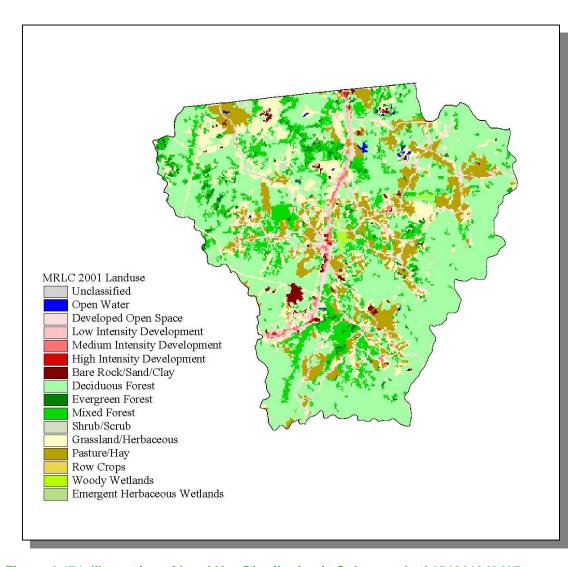


Figure 4-171. Illustration of Land Use Distribution in Subwatershed 051301040407.

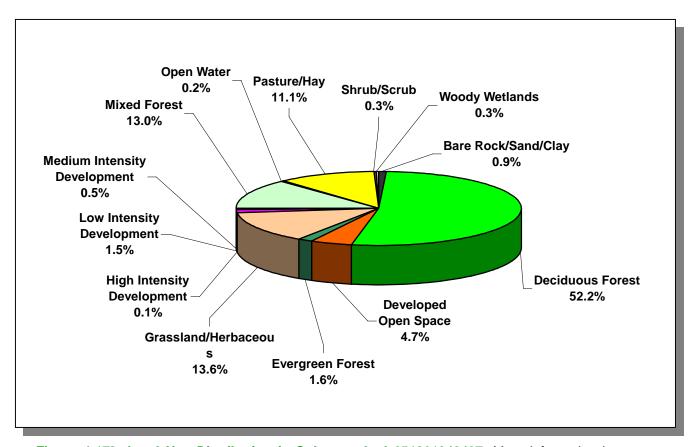


Figure 4-172. Land Use Distribution in Subwatershed 051301040407. More information is provided in Appendix IV.

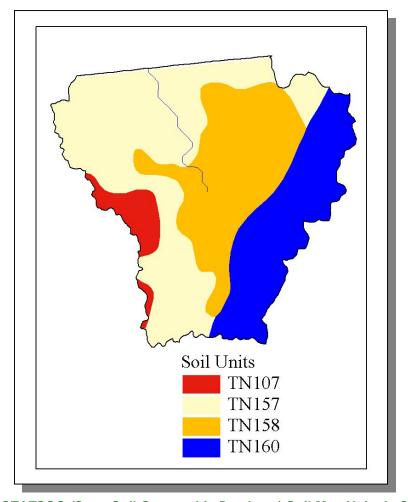


Figure 4-173. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040407.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28
TN158	22.00	С	1.89	5.14	Silty Loam	0.29
TN160	0.00	В	2.69	5.36	Loam	0.25

Table 4-136. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040407. The definition of "Hydrologic Group" is provided in Appendix IV.

193

	COUNTY POPULATION					N WATER	PULATION SHED	
County	1990	1997	2000	Portion of Watershed (%)				% Change (1990-2000)
Scott	18,358	19,816	21,127	4.58	840	907	967	15.1

Table 4-137. Population Estimates in Subwatershed 051301040407.

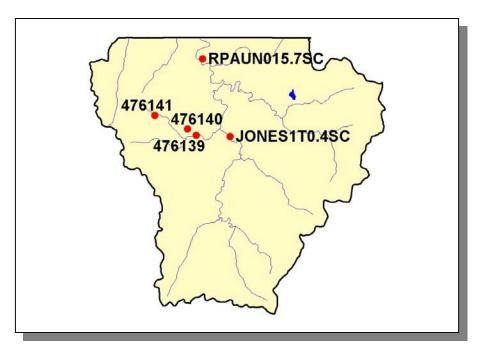


Figure 4-174. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040407. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.D.vi.a. Point Source Contributions.

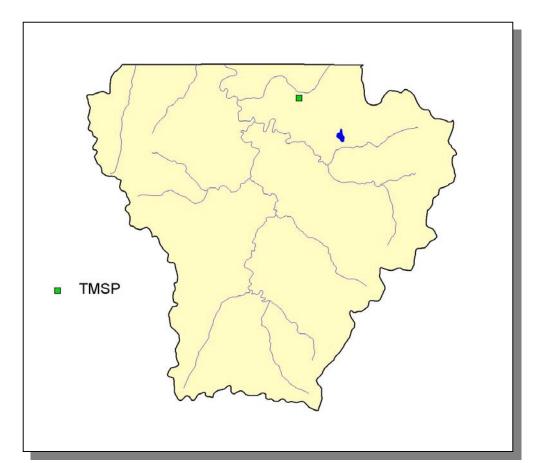


Figure 4-175. Location of Permits Issued in Subwatershed 051301040407. More information, including the names of facilities, is provided in Appendix IV.

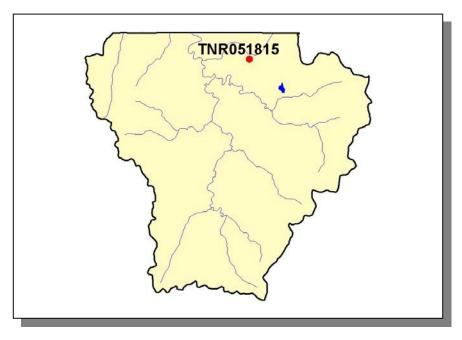


Figure 4-176. Location of TMSP Sites in Subwatershed 051301040407. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.vi.b. Nonpoint Source Contributions.

	LIVESTOCK (COUNTS)										
Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold) Hogs Sheep											
266	544	26	<5	243,273	<5	9					

Table 4-138. Summary of Livestock Count Estimates in Subwatershed 051301040407. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep			
Scott	2,177	4,447	216	1,989,506	196	17	74			

Table 4-139. Summary of Livestock Count Estimates in Scott County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Scott	300.3	300.3	5.5	21.4	

Table 4-140. Forest Acreage and Annual Removal Rates (1987-1994) in Scott County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.33
Grass, Forbs, Legumes (Mixed Pasture)	0.58
Farmsteads and Ranch Headquarters	0.09

Table 4-141. Annual Estimated Total Soil Loss in Subwatershed 051301040407.

4.3.D.vii. 051301040408 (Rock Creek).

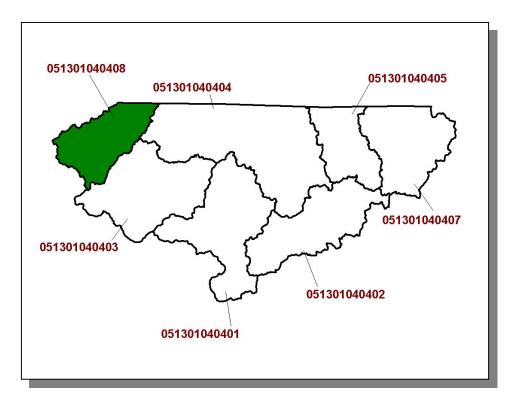


Figure 4-177. Location of Subwatershed 051301040408. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

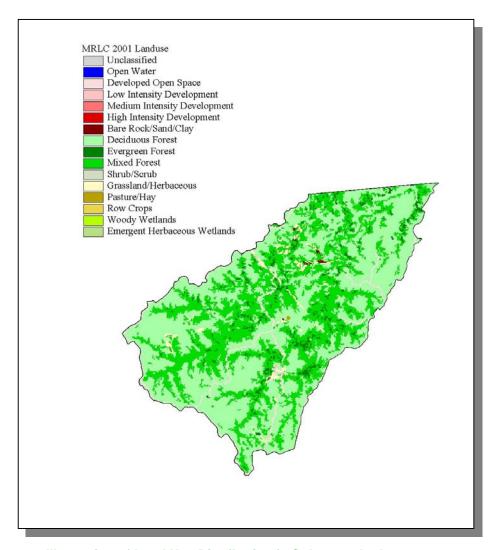


Figure 4-178. Illustration of Land Use Distribution in Subwatershed 051301040408.

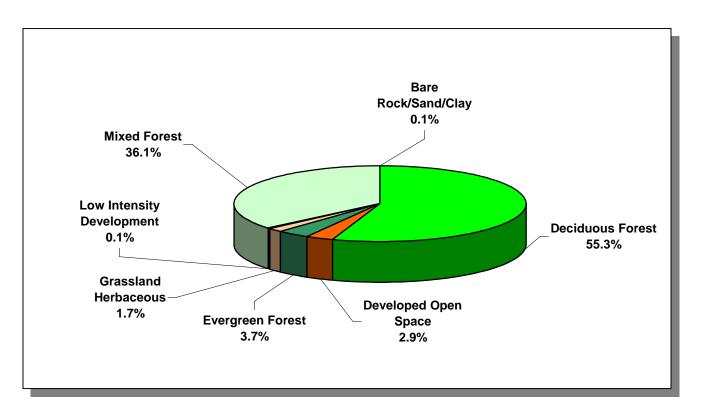


Figure 4-179. Land Use Distribution in Subwatershed 051301040408. More information is provided in Appendix IV.

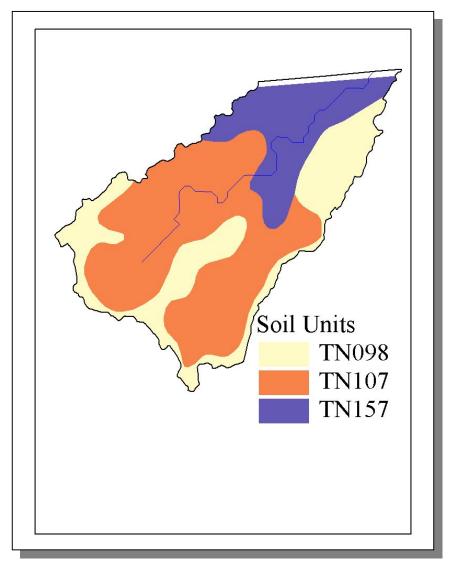


Figure 4-180. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040408.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	рН	SOIL TEXTURE	ERODIBILITY
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28

Table 4-142. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040408. The definition of "Hydrologic Group" is provided in Appendix IV.

201

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Fentress	14,669	15,920	16,625	0.61	90	98	102	13.3
Pickett	4,548	4,631	4,945	6.68	304	309	330	8.6
Scott	18,358	19,816	21,127	0.66	121	131	139	14.9
Total	37,575	40,367	42,697		515	538	571	10.9

Table 4-143. Population Estimates in Subwatershed 051301040408.

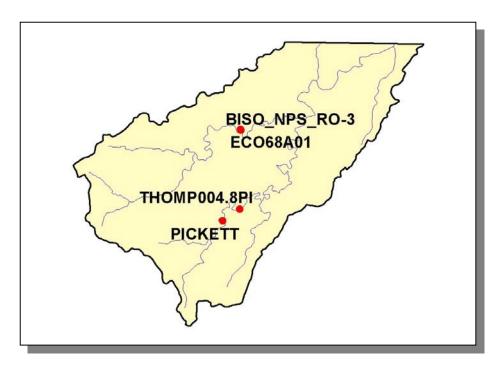


Figure 4-181. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040408. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.D.vii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.vii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle				
<5	<5				

Table 4-144. Summary of Livestock Count Estimates in Subwatershed 051301040408. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep			
Fentress	8,058	17,259	430	7,290,026	474	729	79			
Pickett	5,986	10,864	19		285	99				
Scott	2,177	4,447	216	1,989,506	196	17	74			

Table 4-145. Summary of Livestock Count Estimates in Fentress, Pickett, and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE		
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)	
Fentress	244.1	244.1	3.6	14.3	
Pickett	68.4	68.4	0.2	0.6	
Scott	300.3	300.3	5.5	21.4	

Table 4-146. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress, Pickett, and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.89
Grass (Hayland)	0.11
Legumes, Grass (Hayland)	0.17
Grass, Forbs, Legumes (Mixed Pasture)	0.61
Corn (Row Crops)	16.18
Soybeans (Row Crops)	6.00
Tobacco (Row Crops)	23.18
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	4.91

Table 4-147. Annual Estimated Total Soil Loss in Subwatershed 051301040408.

4.2.E. 0513010405.

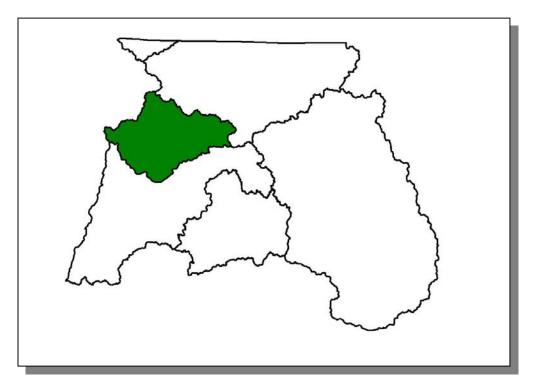


Figure 4-182. Location of Subwatershed 0513010405. All South Fork Cumberland River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.3.E.i. 051301040501 (North Whiteoak Creek).

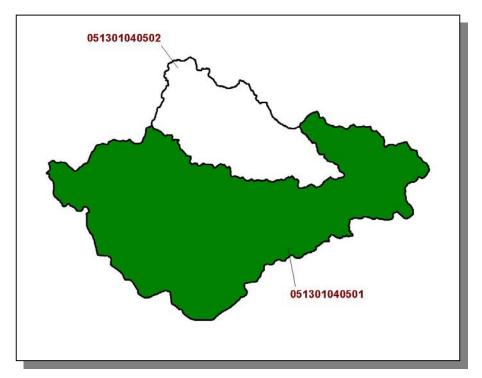


Figure 4-183. Location of Subwatershed 051301040501. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

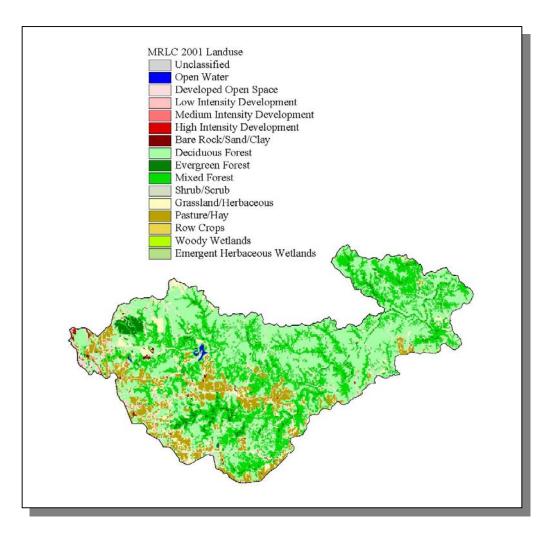


Figure 4-184. Illustration of Land Use Distribution in Subwatershed 051301040501.

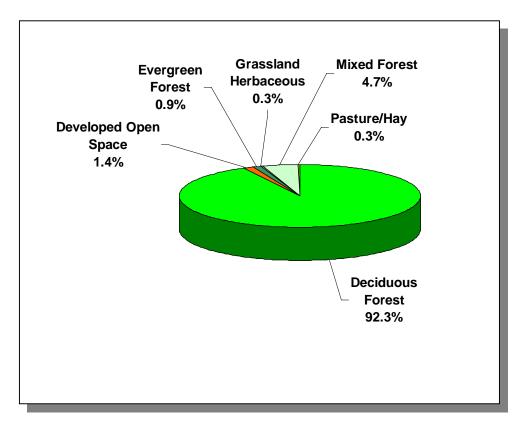


Figure 4-185. Land Use Distribution in Subwatershed 051301040501. More information is provided in Appendix IV.

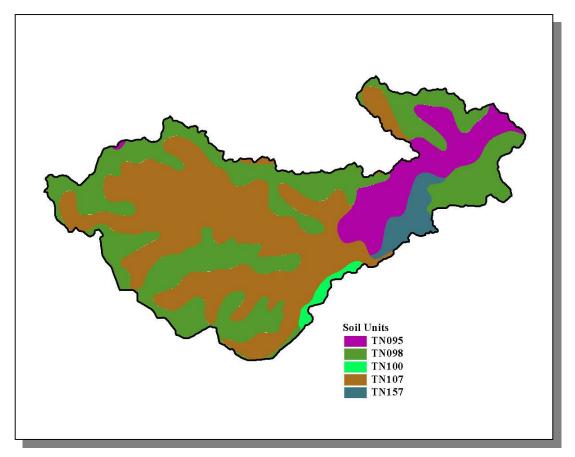


Figure 4-186. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040501.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN100	0.00	В	1.14	3.35	Silty Loam	0.21
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28

Table 4-148. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040501. The definition of "Hydrologic Group" is provided in Appendix IV.

209

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Fentress	14,669	15,920	16,625	12.69	1,861	2,020	2,109	13.3
Scott	18,358	19,816	21,127	0.7	128	138	147	14.8
Total	33,027	35,736	37,752		1,989	2,158	2,256	13.4

Table 4-149. Population Estimates in Subwatershed 051301040501.

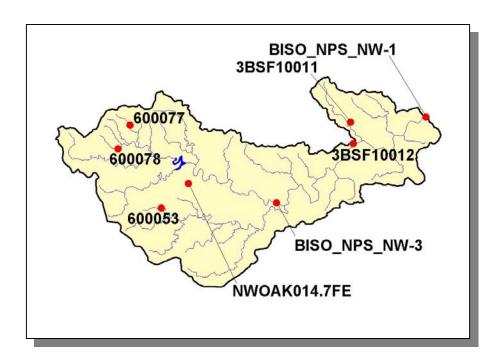


Figure 4-187. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040501. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.E.i.a. Point Source Contributions.

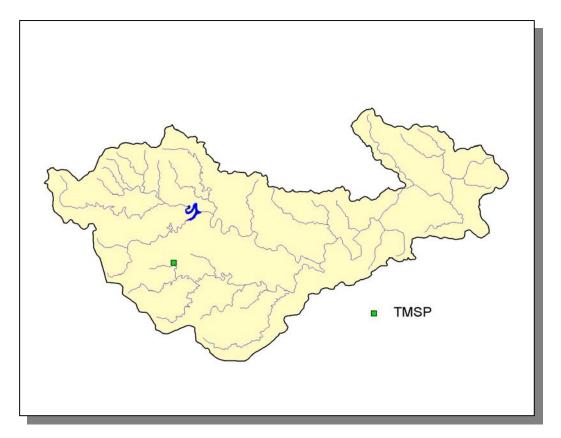


Figure 4-188. Location of Permits Issued in Subwatershed 051301040501. More information, including the names of facilities, is provided in Appendix IV.

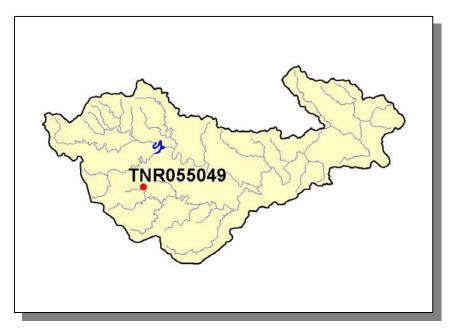


Figure 4-189. Location of TMSP Sites in Subwatershed 051301040501. More information, including the names of facilities, is provided in Appendix IV.

4.2.E.i.b. Nonpoint Source Contributions.

	LIVESTOCK (COUNTS)										
Beef Cow Cattle Milk Cow Chickens (Layers) Chickens (Broilers Sold) Hogs Sheep											
916	1,963	49	<5	829,146	83	9					

Table 4-150. Summary of Livestock Count Estimates in Subwatershed 051301040501. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS									
				Chickens	Chickens					
County	Beef Cow	Cattle	Milk Cow	(Broilers Sold)	(Layers)	Hogs	Sheep			
Fentress	8,058	17,259	430	7,290,026	474	729	79			
Scott	2,177	4,447	216	1,989,506	196	17	74			

Table 4-151. Summary of Livestock Count Estimates in Fentress and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Fentress	244.1	244.1	3.6	14.3	
Scott	300.3	300.3	5.5	21.4	

Table 4-152. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.70
Legumes, Grass (Hayland)	0.56
Grass, Forbs, Legumes (Mixed Pasture)	0.29
Corn (Row Crops)	16.18
Soybeans (Row Crops)	6.00
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	0.38

Table 4-153. Annual Estimated Total Soil Loss in Subwatershed 051301040501.

4.3.E.ii. 051301040502 (Laurel Fork).

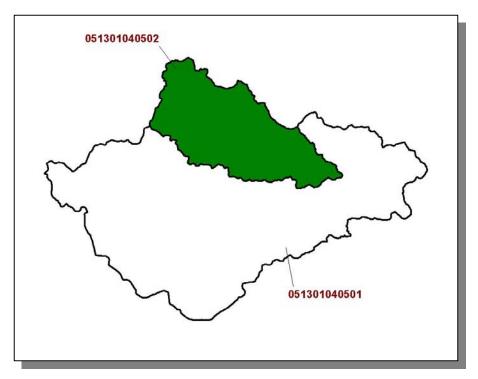


Figure 4-190. Location of Subwatershed 051301040502. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

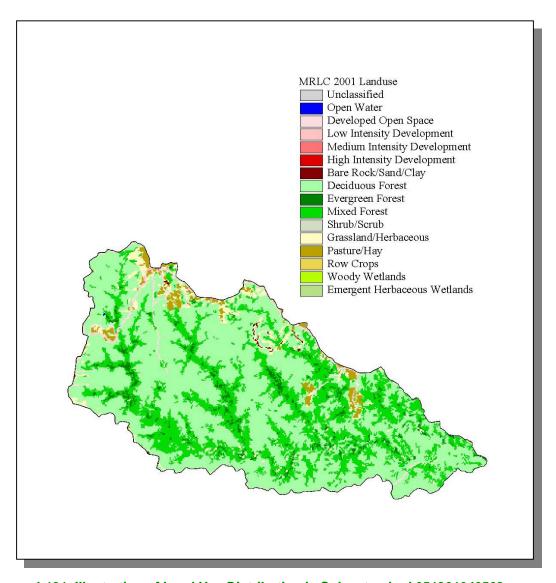


Figure 4-191. Illustration of Land Use Distribution in Subwatershed 051301040502.

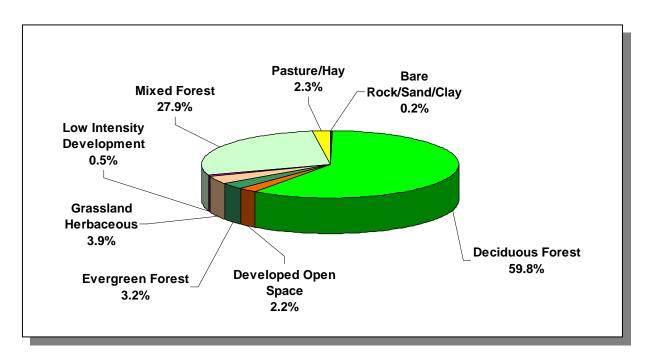


Figure 4-192. Land Use Distribution in Subwatershed 051301040502. More information is provided in Appendix IV.

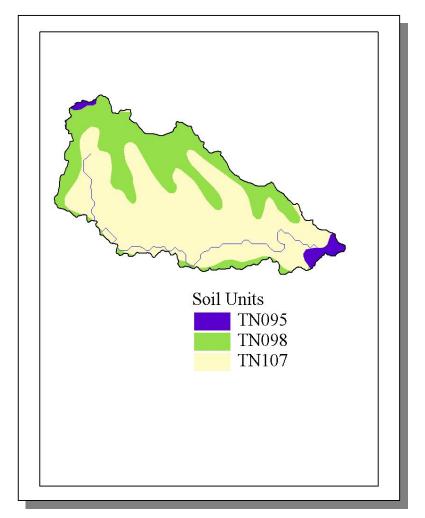


Figure 4-193. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040502.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28

Table 4-154. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040502. The definition of "Hydrologic Group" is provided in Appendix IV.

217

	COUNTY POPULATION					IATED PC N WATER	PULATION SHED	
County	1990	1990 1997 2000 V		Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Fentress	14,669	15,920	16,625	4.32	634	688	718	13.2

Table 4-155. Population Estimates in Subwatershed 051301040502.

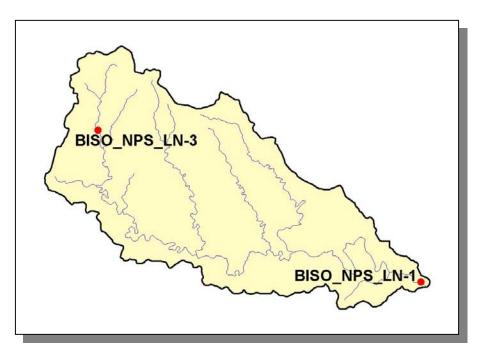


Figure 4-194. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301040502. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.3.E.ii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.E.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS										
Beef Cow Cattle Milk Cow Chickens (Broilers Sold) Hogs Sheep										
75 161 <5 68,091 7 <5										

Table 4-156. Summary of Livestock Count Estimates in Subwatershed 051301040502. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	LIVESTOCK COUNTS										
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep				
Fentress 8,058 17,259 430 7,290,026 474 729 79											

Table 4-157. Summary of Livestock Count Estimates in Fentress County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVEN	ITORY	REMOVAL RATE			
County	Forest Land Timber Land (thousand acres)		Growing Stock (million cubic feet)	Sawtimber (million board feet)		
Fentress	244.1	244.1	3.6	14.3		

Table 4-158. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.72
Legumes, Grass (Hayland)	0.56
Grass, Forbs, Legumes (Mixed Pasture)	0.27
Corn (Row Crops)	16.18
Soybeans (Row Crops)	6.00
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	0.40

Table 4-159. Annual Estimated Total Soil Loss in Subwatershed 0604000401.

4.2.F. 0513010407.

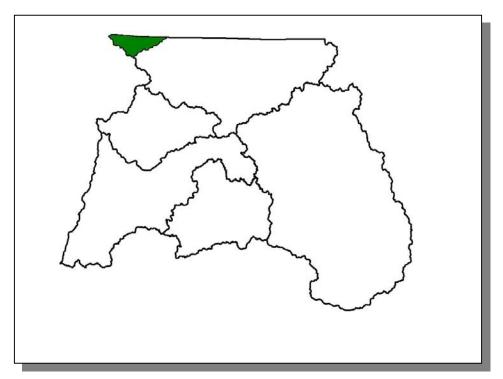


Figure 4-195. Location of Subwatershed 0513010407. All South Fork Cumberland River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.3.F.i. 051301040701 (Little South Fork).

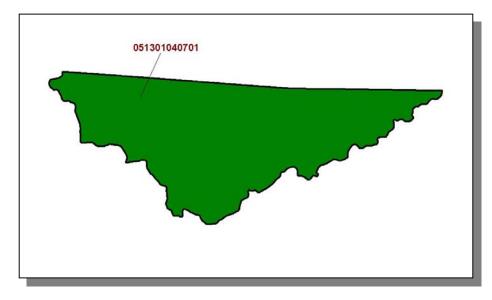


Figure 4-196. Location of Subwatershed 051301040701. All South Fork Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

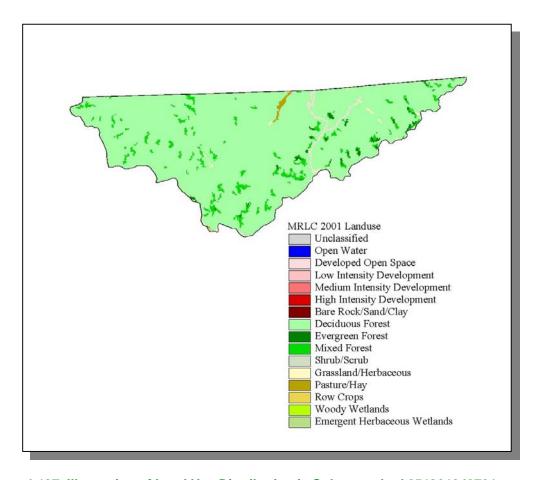


Figure 4-197. Illustration of Land Use Distribution in Subwatershed 051301040701.

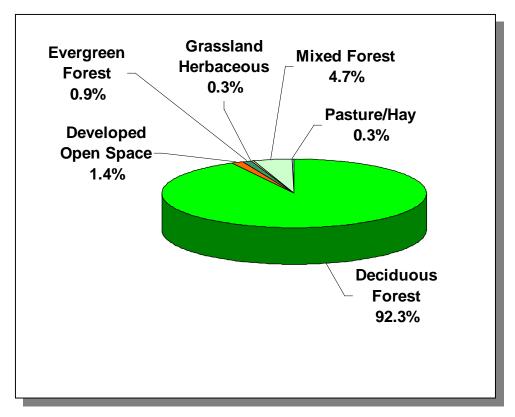


Figure 4-198. Land Use Distribution in Subwatershed 051301040701. More information is provided in Appendix IV.

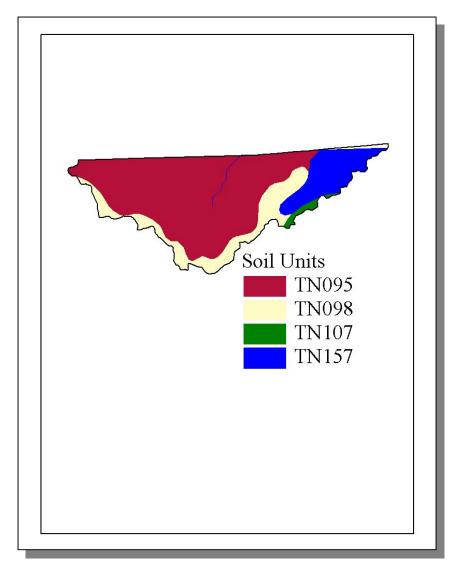


Figure 4-199. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040701.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	рН	SOIL TEXTURE	ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN157	0.00	В	2.38	4.62	Loam	0.28

Table 4-160. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301040701. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					IATED PO N WATER	PULATION SHED	
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Fentress	14,669	15,920	16,625	0.02	3	3	3	0.0
Pickett	4,548	4,631	4,945	5.54	252	257	274	8.7
Total	19,219	20,551	21570		255	260	277	8.6

Table 4-161. Population Estimates in Subwatershed 051301040701.

4.3.F.i.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.F.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Chickens (Broilers Sold)	Hogs		
88	161	127	<5		

Table 4-162. Summary of Livestock Count Estimates in Subwatershed 051301040701. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Broilers Sold)	Chickens (Layers)	Hogs	Sheep
Fentress	8,058	17,259	430	7,290,026	474	729	79
Pickett	5,986	10,864	19		285	99	
Scott	2,177	4,447	216	1,989,506	196	17	74

Table 4-163. Summary of Livestock Count Estimates in Fentress, Pickett, and Scott Counties. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVENTORY		REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Fentress	244.1	244.1	3.6	14.3	
Pickett	68.4	68.4	0.2	0.6	
Scott	300.3	300.3	5.5	21.4	

Table 4-164. Forest Acreage and Annual Removal Rates (1987-1994) in Fentress, Pickett, and Scott Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.10
Grass (Hayland)	0.11
Legumes, Grass (Hayland)	0.07
Grass, Forbs, Legumes (Mixed Pasture)	0.70
Corn (Row Crops)	16.18
Soybeans (Row Crops)	6.00
Tobacco (Row Crops)	23.18
Wheat (Close-Grown Cropland)	43.40
Other Vegetable and Truck Crops	15.94
Farmsteads and Ranch Headquarters	7.34

Table 4-165. Annual Estimated Total Soil Loss in Subwatershed 051301040701.